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QUALINET Multimedia Databases v6.0

Introduction

This document is an updated version of the previous "QUALINET Multimedia Databases v5.5", which lists and summarizes basic description of available multimedia databases based on literature search and on the feedback from the Qualinet partners. This document is intended to be used as offline version of the "QUALINET Multimedia Databases Online," Qualinet's (http://www.qualinet.eu/) main resource for sharing of the datasets among Qualinet members and scientific community. For the recent information on the registered datasets please refer to "Qualinet Databases" (http://dbq.multimediatech.cz/).

The listed databases focus mainly on the publicly available audiovisual media content - annotated with subjective ratings - as well as on select databases with content with no subjective ratings, and on some databases with special content.

Each database in this document is annotated by its Title, Link, Description, Access information, Copyright notice provided by the database owner, Requested citation text for publications, Contact information and associated References. There is also information if the database was created by one of the current Qualinet partner institutions.

The initial resource used to create basis of this overview was, in March 2011, the website by Stefan Winkler [Win11]. Further datasets were since then reported by the Qualinet partners.

Comments or questions regarding the "Qualinet Databases" should be directed to Karel Fliegel (fliegek@fel.cvut.cz), Qualinet Datasets TF leader.

Contents

1 Annotated Multimedia Quality Databases

The following list contains databases of images or videos annotated with the results from subjective tests. For each database you can find a link to its online repository, brief description and relevant references.

1.1 Annotated Image Quality Databases

1.1.1 LIVE Image Quality Assessment Database

Link: http://live.ece.utexas.edu/research/quality/subjective.htm

Description:

A typical example of image quality database is the one available from the Laboratory for Image & Video Engineering (LIVE) from the University of Texas at Austin, which has been used in many studies. It is popular among researchers. This LIVE Image Quality Assessment Database (LIVE IQAD) contains still images annotated with MOS ratings. The Release 2 distortions include JPEG (169 images), JPEG2000 (175 images), white noise (145 images), Gaussian blur (145 images) and JPEG2000 with bit errors in simulated Rayleigh fading channel (145 images).

Access:

ZIP archive (~700MB), password protected, registration form to be filled.
Link: http://live.ece.utexas.edu/research/quality/release2/databaserelease2.zip

Citation:

We have decided to make the data set available to the research community free of charge. If you use these images in your research, we kindly ask that you reference this website and our papers listed below [SSB06], [WBS04], [SWL04].

Copyright notice:

Link: http://live.ece.utexas.edu/research/quality/copyright.htm
Permission is hereby granted, without written agreement and without license or royalty fees, to use, copy, modify, and distribute this database (the images, the results and the source files) and its documentation for any purpose, provided that the copyright notice in its entirety appear in all copies of this database, and the original source of this database, Laboratory for Image and Video Engineering (LIVE, http://live.ece.utexas.edu) and Center for Perceptual Systems (CPS, http://www.cps.utexas.edu) at the University of Texas at Austin (UT Austin, http://www.utexas.edu), is acknowledged in any publication that reports research using this database.

Contacts:

Anush Moorthy (anushmoorthy@gmail.com)

References:

[SSB06] H.R. Sheikh, M.F. Sabir and A.C. Bovik, "A statistical evaluation of recent full reference image quality assessment algorithms", IEEE Transactions on Image Processing, vol. 15, no. 11, pp. 3440-3451, Nov. 2006.
[WBS04] Z. Wang, A.C. Bovik, H.R. Sheikh and E.P. Simoncelli, "Image quality assessment: from error visibility to structural similarity," IEEE Transactions on Image Processing , vol.13, no.4, pp. 600- 612, April 2004.
[SWL04] H.R. Sheikh, Z.Wang, L. Cormack and A.C. Bovik, "LIVE Image Quality Assessment Database Release 2", http://live.ece.utexas.edu/research/quality.

Qualinet partner: NO

1.1.2 LIVE Multiply Distorted Image Quality Database

Link: http://live.ece.utexas.edu/research/quality/live_multidistortedimage.html

Description:

A subjective study was conducted in two parts to obtain human judgments on images corrupted under two multiple distortion scenarios: 1) image storage where images are first blurred and then compressed by a JPEG encoder. 2) camera image acquisition process where images are first blurred due to narrow depth of field or other defocus and then corrupted by white Gaussian noise to simulate sensor noise.

Access:

Database can be obtained from the following link:
http://live.ece.utexas.edu/research/quality/LIVEmultidistortiondatabase.rar
Database is password protected, please fill the form and the information will be sent to you:
https://docs.google.com/spreadsheet/viewform?formkey=dG1UVURtbDI4Qk8ybHpjTDQwMjBfNHc6MA#gid=0

Citation:

We are making the LIVE Multiply Distorted Image Quality Database available to the research community free of charge. If you use this database in your research, we kindly ask that you reference our papers listed below [JMM12].

Copyright notice:

Link: http://live.ece.utexas.edu/research/quality/copyright.htm
Permission is hereby granted, without written agreement and without license or royalty fees, to use, copy, modify, and distribute this database (the images, the results and the source files) and its documentation for any purpose, provided that the copyright notice in its entirety appear in all copies of this database, and the original source of this database, Laboratory for Image and Video Engineering (LIVE, http://live.ece.utexas.edu) and Center for Perceptual Systems (CPS, http://www.cps.utexas.edu) at the University of Texas at Austin (UT Austin, http://www.utexas.edu), is acknowledged in any publication that reports research using this database.

Contacts:

Dinesh Jayaraman (dinesh.jayaraman123@gmail.com) - Graduate student UT Austin in 2012
Anish Mittal (mittal.anish@gmail.com) - Graduate student at UT Austin
Dr. Anush K. Moorthy (anushmoorthy@gmail.com) - Graduated from UT Austin in 2012
Dr. Alan C. Bovik (bovik@ece.utexas.edu) - Professor, Dept. of ECE, UT Austin

References:

[JMM12] Jayaraman, D., Mittal, A., Moorthy, A. K. and Bovik, A. C., Objective Quality Assessment of Multiply Distorted Images, Proceedings of Asilomar Conference on Signals, Systems and Computers, 2012.

Qualinet partner: NO

1.1.3 Tampere Image Database (TID2008)

Link: http://www.ponomarenko.info/tid2008.htm

Description:

A color image database for evaluation of image quality metrics is available from the Tampere University of Technology. The Tampere Image Database (TID2008) contains a large amount of test images distorted with various techniques, e.g. different types of noise, blur, JPEG and JPEG2000 compression and transmission with errors, local distortions, luminance and contrast changes. The database contains 25 reference images (Kodak Lossless True Color Image Suite, http://r0k.us/graphics/kodak/), 1700 distorted images (17 types of distortion at 4 levels of distortion). The MOS is a result of 838 experiments with 8387 observers resulting into 512856 evaluations of relative visual quality in image pairs.

Citation:

In case of publishing results obtained by means of TID2008 please refer to one of the following papers [PLZ08], [PBE09].

Access:

RAR archive (~550MB), no password.
Link: http://www.ponomarenko.info/tid/tid2008.rar

Contacts:

Nikolay Ponomarenko (nikolay@ponomarenko.info)

References:

[PLZ08] N. Ponomarenko, V. Lukin, A. Zelensky, K. Egiazarian, M. Carli, F. Battisti, "TID2008 - A Database for Evaluation of Full-Reference Visual Quality Assessment Metrics", Advances of Modern Radioelectronics, Vol. 10, pp. 30-45, 2009.
[PBE09] N. Ponomarenko, F. Battisti, K. Egiazarian, J. Astola, V. Lukin "Metrics performance comparison for color image database", Fourth international workshop on video processing and quality metrics for consumer electronics, Scottsdale, Arizona, USA. Jan. 14-16, 2009, 6 p.

Qualinet partner: NO

1.1.4 Tampere Image Database (TID2013)

Link: http://www.ponomarenko.info/tid2013.htm

Description:

TID2013 is an extension of TID2008. TID2013 is intended for evaluation of full-reference image visual quality assessment metrics. TID2013 allows estimating how a given metric corresponds to mean human perception. The TID2013 contains 25 reference images and 3000 distorted images (25 reference images x 24 types of distortions x 5 levels of distortions). Reference images are obtained by cropping from Kodak Lossless True Color Image Suite.

Citation:

In case of publishing results obtained by means of TID2013 please refer to one of the following papers [PIL13a], [PIL13b].

Access:

RAR archive (~908MB), no password.
Link: http://www.ponomarenko.info/tid2013/tid2013.rar

Contacts:

Nikolay Ponomarenko (nikolay@ponomarenko.info)

References:

[PIL13a] N. Ponomarenko, O. Ieremeiev, V. Lukin, K. Egiazarian, L. Jin, J. Astola, B. Vozel, K. Chehdi, M. Carli, F. Battisti, C.-C. Jay Kuo, Color Image Database TID2013: Peculiarities and Preliminary Results, Proceedings of 4th Europian Workshop on Visual Information Processing EUVIP2013, Paris, France, June 10-12, 2013, pp. 106-111.
[PIL13b] N. Ponomarenko, O. Ieremeiev, V. Lukin, K. Egiazarian, L. Jin, J. Astola, B. Vozel, K. Chehdi, M. Carli, F. Battisti, C.-C. Jay Kuo, A New Color Image Database TID2013: Innovations and Results, Proceedings of ACIVS, Poznan, Poland, Oct. 2013, pp. 402-413.

Qualinet partner: NO

1.1.5 MICT Image Quality Database

Link: http://mict.eng.u-toyama.ac.jp/mictdb.html

Description:

The Media Information and Communication Technology Laboratory (MICT) at the University of Toyama offer their database where the images are distorted with JPEG and JPEG2000 codecs.

Access:

ZIP archive (~140MB), no password.
Link: http://mict.eng.u-toyama.ac.jp/toyama_database.zip

Citation:

This data set is available to the research community with free of charge.

Contacts:

Prof. Yuukou Horita (horita@eng.u-toyama.ac.jp)
Keiji Shibata (shibata@eng.u-toyama.ac.jp)
Yoshikazu Kawayoke (kawayoke@nyoke.com)

Qualinet partner: YES

1.1.6 IRCCyN/IVC Image Quality Database

Link: http://www2.irccyn.ec-nantes.fr/ivcdb/

Description:

The (IRCCyN/IVC) Image Quality Database available from the Institut de Recherche en Communications at Cybernétique de Nantes includes JPEG, JPEG2000, and Locally Adaptive Resolution (LAR) coding and blurred images. These algorithms have very different types of distortion. Subjective evaluations were made using a DSIS (Double Stimulus Impairment Scale method with 5 categories and 15 observers. 10 original images were used.

Access:

ZIP archive (~116MB), no password.
Link: http://www2.irccyn.ec-nantes.fr/ivcdb/IVC_SubQualityDB.zip

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_SubQuality
Username: dbq-mirrors
Password: kucykepe

References:

[LA06] Patrick Le Callet, Florent Autrusseau, Subjective quality assessment IRCCyN/IVC database, http://www.irccyn.ec-nantes.fr/ivcdb/.
[NLA06] Alexandre Ninassi, Patrick Le Callet, Florent Autrusseau, "Pseudo No Reference image quality metric using perceptual data hiding", in SPIE Human Vision and Electronic Imaging, vol. 6057-08, San Jose, CA, USA, January 2006.

Qualinet partner: YES

1.1.7 IRCCyN/IVC Scores on Toyama (MICT) Database

Link: http://www.irccyn.ec-nantes.fr/spip.php?article552

Description:

This database complements the MICT database with different protocol, different type of display device and different populations. The results of the two databases can be used to consider the display technology and the population in a quality model, like in this paper for example. There

are 14 reference images and the degradations are jpeg and jpeg2000 coding. Six jpeg compression rates (15, 20, 27, 37, 55 and 79) and seven jpeg2000 compression rates (0, 12, 24, 32, 48, 72 and 96) are selected.

Access:

RAR archive (~80MB), no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_Scores_On_Toyama_Images/

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_Scores_On_Toyama_Images
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite one of the following papers [NLL08], [TAP08] in your reference if you use this database for your work.

References:

[NLL08] Alexandre Ninassi, Olivier Le Meur, Patrick Le Callet and Dominique Barba, "Which Semi-Local Visual Masking Model For Wavelet Based Image Quality Metric ?", ICIP 2008.
http://hal.archives-ouvertes.fr/hal-00343502/en/
[TAS08] Sylvain Tourancheau, Florent Autrusseau, Parvez Z. M. Sazzad, Yuukou Horita, "Impact of the subjective dataset on the performance of image quality metrics", ICIP 2008.
http://hal.archives-ouvertes.fr/hal-00343502/en/

Qualinet partner: YES

1.1.8 IRCCyN/IVC DIBR Images Database

Link: http://www.irccyn.ec-nantes.fr/spip.php?article866

Description:

This database contains 96 still images and their associated subjective scores. Three different multiview plus depth (MVD) sequences are considered in this database. The sequences are Book Arrival (1024x768, 16 cameras with 6.5cm spac-ing), Lovebird1 (1024x768, 12 cameras with 3.5 cm spacing) and Newspaper (1024x768, 9 cameras with 5 cm spacing). Seven DIBR algorithms processed the three sequences to generate, for each sequence, four new viewpoints. These seven DIBR algorithms are labeled from A1 to A7. The test was conducted in an ITU conforming test environment. For the subjective assessments, the stimuli were displayed on a TVLogic LVM401W, and according to ITU-T BT.500. See the paper for more details.

Access:

Still images at FTP:
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_DIBR_Images/

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_DIBR_Images
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [BPL11].

References:

[BPL11] Emilie Bosc, Romuald Pépion, Patrick Le Callet, Martin Köppel, Patrick Ndjiki-Nya, Muriel Pressigout, Luce Morin, "Towards a New Quality Metric for 3-D Synthesized View Assessment", IEEE Journal on Selected Topics in Signal Processing (2011) J-STSP-ETVC-00048-2011.

Qualinet partner: YES

1.1.9 IRCCyN/IVC "Broken Arrows" database

Link: http://www.irccyn.ec-nantes.fr/~autrusse/Databases/BrokenArrows/

Description:

10 original grayscale images were used (5 natural images: BOWS2 DB and 5 art images: EROS DB), 120 distorted images were generated with 6 different embedding strength, and either with or without CSF weighting function. These "Broken Arrows" watermarking algorithm was used (see the "bows2" contest). Subjective evaluations were made at viewing distance of 6 times the screen height using a DSIS (Double Stimulus Impairment Scale) method with 5 categories and 17 observers. Distortions for each processing and each image have been optimized in order to uniformly cover the subjective scale.

Access:

Still images and a Microsoft Excel spreadsheet, giving all subjective quality scores is included in one archive at HTTP (27MB):
Link: http://www.irccyn.ec-nantes.fr/~autrusse/Databases/BrokenArrows/BA_SubjExp.zip

Still images and a Microsoft Excel spreadsheet, giving all subjective quality scores is included in one archive at HTTP:
Link: http://www.irccyn.ec-nantes.fr/~autrusse/Databases/BrokenArrows/BA_SubjExp.zip

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_BrokenArrows
Username: dbq-mirrors
Password: kucykepe

Contacts:

Florent Autrusseau (Florent.Autrusseau@univ-nantes.fr)

Citation:

Please, cite the following paper in your reference if you use this database for your work [CPA10].

References:

[CPA10] M. Carosi, V. Pankajakshan, F. Autrusseau, "Toward a simplified perceptual quality metric for watermarking applications", Proceedings of the SPIE Electronic Imaging, conf. 7542, January 2010, San Jose, CA, USA.

Qualinet partner: YES

1.1.10 IRCCyN/IVC Enrico database

Link: http://www.irccyn.ec-nantes.fr/~autrusse/Databases/Enrico/

Description:

5 original grayscale images were used, 100 distorted images were generated from 10 watermarking algorithms with 2 embedding strengths. These algorithms have the advantage to generate very different type of distortions. Subjective evaluations were made at viewing distance of 6 times the screen height using a DSIS (Double Stimulus Impairment Scale) method with 5 categories and 16 observers. Distortions for each processing and each image have been optimized in order to uniformly cover the subjective scale.

Access:

Still images and a Microsoft Excel spreadsheet, giving all subjective quality scores is included in one archive at HTTP (20MB):
Link: http://www.irccyn.ec-nantes.fr/~autrusse/Databases/Enrico/Enrico.zip

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_Enrico
Username: dbq-mirrors
Password: kucykepe

Contacts:

Florent Autrusseau (Florent.Autrusseau@univ-nantes.fr)

Citation:

Please, cite the following paper in your reference if you use this database for your work [MAL07].

References:

[MAL07] E. Marini, F. Autrusseau, P. Le Callet, P. Campisi, "Evaluation of standard watermarking techniques", in SPIE Electronic Imaging, Security, Steganography, and Watermarking of Multimedia Contents IX, San Jose , USA, January 2007.
[LAC08] P. Le Callet, F. Autrusseau, P. Campisi, "Visibility control and Quality assessment of watermarking and data hiding algorithms", Chap IX in Multimedia Forensics and Security, Idea Group Publishing, Editor: Chang-Tsun Li, pp. 163-192, ISBN: 978-1-59904-869-7, April 2008.

Qualinet partner: YES

1.1.11 IRCCyN/IVC Fourier Subband database

Link: http://www.irccyn.ec-nantes.fr/~autrusse/Databases/FourierSB/

Description:

5 original grayscale images, 210 distorted images were generated from noise addition in 6 different frequency (Fourier) sub-bands of various frequency range, with 7 embedding strengths. Marked images are entitled "Marked_boats_X_Y.bmp", where 'X' stands for the embedding sub band index in a Perceptual Channel Decomposition (PCD), splitting the Fourier frequency stectrum into 17 overlapping sub-bands, see the paper referenced at the bottom of the page for further details on the perceptual decomposition (the PCD is depicted on the figure below where every sub-band is indexed) and 'Y' is the embedding strength. A Gaussian noise was independently modulated within one PCD sub band, and spread over the whole sub-band. Only subbands number 2, 3, 6, 7, 12 and 13 (see index on Figure 1) were used during this experiment. The purpose of this experiment was to highlight the incoherencies of objective quality metrics when distortions occur in a different frequency range. Subjective evaluations were made at viewing distance of 6 times the screen height using a DSIS (Double Stimulus Impairment Scale)

method with 5 categories and 7 observers. Distortions for each processing and each image have been optimized in order to uniformly cover the subjective scale.

Access:

Still images and a Microsoft Excel spreadsheet, giving all subjective quality scores is included in one archive at HTTP (52MB):
Link: http://www.irccyn.ec-nantes.fr/~autrusse/Databases/FourierSB/FourierSB.zip

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_FourierSB
Username: dbq-mirrors
Password: kucykepe

Contacts:

Florent Autrusseau (Florent.Autrusseau@univ-nantes.fr)

Citation:

Please, cite the following paper in your reference if you use this database for your work [AL07].

References:

[AL07] F. Autrusseau, P. Le Callet, "A robust image watermarking technique based on quantization noise visibility thresholds",Elsevier Signal Processing, Volume 87, Issue 6, June 2007, Pages 1363-1383.
[CPA10] M. Carosi, V. Pankajakshan, F. Autrusseau, "Toward a simplified perceptual quality metric for watermarking applications", Proceedings of the SPIE Electronic Imaging, conf. 7542, January 2010, San Jose, CA, USA.

Qualinet partner: YES

1.1.12 IRCCyN/IVC LAR database

Link: http://www.irccyn.ec-nantes.fr/~autrusse/Databases/FourierSB/

Description:

8 original color images were used (4 natural images: Jpeg.org DB and 4 art images: EROS DB), 120 distorted images were generated from 3 different processing, and 5 compression rates. Compressions considered: JPEG, JPEG2000, LAR coding. These algorithms have the advantage to generate very different type of distortions. Subjective evaluations were made at viewing distance of 6 times the screen height using a DSIS (Double Stimulus Impairment Scale) method with 5 categories and 20 observers. Distortions for each processing and each image have been optimized in order to uniformly cover the subjective scale.

Access:

Still images and a Microsoft Excel spreadsheet, giving all subjective quality scores is included in one archive at HTTP (54MB):
Link: http://www.irccyn.ec-nantes.fr/~autrusse/Databases/LAR/LAR_SubjExp.zip

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_LAR_SubjExp
Username: dbq-mirrors
Password: kucykepe

Contacts:

Florent Autrusseau (Florent.Autrusseau@univ-nantes.fr)

Citation:

Please, cite the following paper in your reference if you use this database for your work [SPA09].

References:

[SPA09] C. Strauss, F. Pasteau, F. Autrusseau, M. Babel, L. Bedat, O. Deforges, "Subjective and Objective Quality Evaluation of LAR coded art images", IEEE Intl. Conf. on Multimedia & Expo, ICME 2009, New York, USA, June 28 - July 3 2009.

Qualinet partner: YES

1.1.13 IRCCyN/IVC DWTvsDTCWT DB

Link: http://www.irccyn.ec-nantes.fr/~autrusse/Databases/MeerwaldDB/

Description:

12 original grayscale images were used (from the BOWS-2 contest), 120 distorted images were generated from 5 embedding strengths either in the wavelet domain (DWT) or using the Dual Tree Complex Wavelet transform (DT-CWT). Subjective evaluations were made at viewing distance of 6 times the screen height using a DSIS (Double Stimulus Impairment Scale) method with 5 categories and 14 observers. Distortions for each processing and each image have been optimised in order to uniformly cover the subjective scale.

Access:

Still images and a Microsoft Excel spreadsheet, giving all subjective quality scores is included in one archive at HTTP (31MB):
Link: http://www.irccyn.ec-nantes.fr/~autrusse/Databases/MeerwaldDB/MeerwaldDB.zip

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_DWTvsDTCWT
Username: dbq-mirrors
Password: kucykepe

Contacts:

Florent Autrusseau (Florent.Autrusseau@univ-nantes.fr)

Citation:

Please, cite the following paper in your reference if you use this database for your work [CPA10].

References:

[CPA10] M. Carosi, V. Pankajakshan, F. Autrusseau, "Toward a simplified perceptual quality metric for watermarking applications", Proceedings of the SPIE Electronic Imaging, conf. 7542, January 2010, San Jose, CA, USA.

Qualinet partner: YES

1.1.14 IRCCyN/IVC Selective Encryption database

Link: http://www.irccyn.ec-nantes.fr/~autrusse/Databases/SelectiveEncryption/

Description:

8 original color images were used, 200 distorted images were generated from 5 different encryption techniques with 5 parameters. Subjective evaluations were made at viewing distance of 6 times the screen height using a "Pair Comparison" protocol method with 5 categories and 21

observers. Distortions for each processing and each image have been optimized in order to uniformly cover the subjective scale. The source code for running the subjective experiment can be found here: http://www.irccyn.ec-nantes.fr/~autrusse/jnd/SDLPairComp.zip.

Access:

Still images and a Microsoft Excel spreadsheet, giving all subjective quality scores is included in one archive at HTTP (47MB):
Link: http://www.irccyn.ec-nantes.fr/~autrusse/Databases/SelectiveEncryption/SelectiveEncryption.zip

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_SelectiveEncryption
Username: dbq-mirrors
Password: kucykepe

Contacts:

Florent Autrusseau (Florent.Autrusseau@univ-nantes.fr)

Citation:

Please, cite the following in your reference if you use this database for your work [ASP10].

References:

[ASP10] Florent Autrusseau, Thomas Stuetz and Vinod Pankajakshan, Subjective quality assessment of selective encryption techniques, http://www.irccyn.ec-nantes.fr/~autrusse/Databases/.

Qualinet partner: YES

1.1.15 IRCCyN/IVC HDR Images JPEG Compression

Link: http://www.irccyn.ec-nantes.fr/spip.php?article1447

Description:

"This database contains 150 images, the subjective results including votes and Mean Opinion Scores. 10 different still image contents were used. For each content, the reference (without degradation) and 14 different degradations called Hypothetical Reference Circuits (HRCs) were subjectively evaluated. The HRCs are based on JPEG coding and are completely presented in the paper [NPL13]. This JPEG coding is apply on the original images with 7 different bitrates. Two objective optimization criteria are used. A description of the SRC and the HRC is provided in the description file including the description of the viewing environment in which the image quality was evaluated."

Access:

Database at FTP, no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_HDR_Images_JPEG_Compression/

Contacts:

Romuald Pepion (ivcdb@univ-nantes.fr)

Citation:

Please, cite the following paper in your reference if you use this database for your work [NPL13].

References:

[NPL13] Narwaria M., Perreira Da Silva M., Le Callet P., Pépion R., Tone mapping-based high-dynamic-range image compression : study of optimization criterion and perceptual quality, Optical Engineering 52, 10 (2013) pp. 102008-1 _ 102008-15, October 2013.

Qualinet partner: YES

1.1.16 IRCCyN/IVC Pair Comparison between TMO images

Link: http://ivc.univ-nantes.fr/en/databases/PairCompTMO/

Description:

The PairComp TMO images database contains 100 images in FullHD (1920x1080 pixels) resolution. The results of the Pair Comparison are provided with the images. 10 High Dynamic Range (HDR) images were processed with 9 sets of parameter of Tone Mapper Operators to produce 90 LDR images. The HDR contents were displayed like a reference for the half of participants. We used Pair Comparison with reduced matrix (not full matrix) as test methodology. This database was created to compare different TMOs and sets of parameters. The goal is to know which one are the preferred one knowing or not the HDR reference.

Access:

Database at FTP, no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/PairCompTMO/

Contacts:

ivcdb@univ-nantes.fr

Citation:

Please, cite the following paper in your reference if you use this database for your work [KNF14].

References:

[KNF14] L. Krasula, M. Narwaria, K. Fliegel, P. Le Callet, Influence of hdr reference on observers preference in tone-mapped images, 7th International Workshop on Quality of Multimedia Experience (QoMEX), 26-29 May 2014.

Qualinet partner: YES

1.1.17 Categorical Image Quality (CSIQ) Database

Link: http://vision.okstate.edu/index.php?loc=csiq

Description:

The Image Coding and Analysis Lab at the Oklahoma State University offers Categorical Image Quality (CSIQ) Database. This database consists of 30 original images. Each original image in the database is distorted using six different types of distortions at four to five different levels of distortion. The distortions used in CSIQ are: JPEG compression, JPEG-2000 compression, global contrast decrements, additive pink Gaussian noise, and Gaussian blurring. This result in 866 distorted versions of original images.

Citation:

If you use this database, please cite the following paper [LC10].

Access:

ZIP archives, no password.

Links:
Subjective rating: http://vision.okstate.edu/csiq/csiq.beta.xlsx
Distorted images: http://vision.okstate.edu/csiq/dst_imgs.zip
Original images: http://vision.okstate.edu/csiq/src_imgs.zip

References:

[LC10] E. C. Larson and D. M. Chandler, "Most apparent distortion: full-reference image quality assessment and the role of strategy," Journal of Electronic Imaging, 19 (1), March 2010.

Qualinet partner: NO

1.1.18 Digitally Retouched Image Quality (DRIQ) Database

Link: http://vision.okstate.edu/index.php?loc=driq

Description:

DRIQ (Digitally Retouched Image Quality) database is a full-reference enhanced-image database. This database consists of 104 images in which 78 images were digitally retouched from 26 original images with different contents. Subjective ratings of these images were obtained from 9 human observers. The ability to quantify the visual quality of an image in a manner that agrees with human subjective rating is an important step in many applications, e.g., image compression, image denoising, or image retouching. Researchers in the past several decades have proposed a variety of computational methods for image quality assessment (IQA). A major portion of those methods focus on full-reference IQA problem which assumes the availability of the original image and thus outputs an index that represents the visual quality of the target (modified) image relative to the original image. It is important to note that almost all current full-reference IQA methods were specifically designed for and tested on degraded images. However, in many image processing applications, the target image is actually enhanced from the original image and thus has better visual quality. It is generally impossible for current IQA algorithms to indicate whether the target image has better or worse quality than the original image.

Access:

ZIP archives, no password.
Links:
Subjective rating: http://vision.okstate.edu/driq/DRIQ_DMOS.xlsx
Images: http://vision.okstate.edu/driq/DRIQ.zip

References:

[VPC14] Cuong Vu, Thien Phan, and Damon Chandler, Can Current Image Quality Assessment Algorithms Predict Visual Quality of Enhanced Images?, preprint, 2014.

Qualinet partner: NO

1.1.19 Wireless Imaging Quality (WIQ) Database

Link: http://www.bth.se/tek/rcg.nsf/pages/wiq-db

Description:

The Wireless Imaging Quality (WIQ) Database is available from the Radio Communication Group at the Blekinge Institute of Technology. In this case 40 images were evaluated by 30 non-expert viewers. The database focuses on gray-scale JPEG compressed images and distortions caused by a simulated wireless channel. Seven reference images were used in the subjective

experiments, 80 distorted (test) images were used in the subjective experiments, subjective scores for all 80 images are obtained from the two subjective experiments.

Access:

ZIP archives, password protected, password upon request Ulrich Engelke (ulrichengelke@gmail.com).
Links:
Reference images (~1.55MB)
http://www.bth.se/tek/rcg.nsf/attachments/wiq_ref_images_zip/$file/wiq_ref_images.zip
Distorted images from test 1 (~8.88MB)
http://www.bth.se/tek/rcg.nsf/attachments/wiq_dst_images_t01_zip/$file/wiq_dst_images_t01.zip
Distorted images from test 2 (~8.72 MB)
http://www.bth.se/tek/rcg.nsf/attachments/wiq_dst_images_t02_zip/$file/wiq_dst_images_t02.zip
Subjective scores, Matlab workspace (~7 kB)
http://www.bth.se/tek/rcg.nsf/attachments/wiq_subjective_scores_matlab_zip/$file/wiq_subjective_scores_matlab.zip
Subjective scores, Excel spreadsheet (~45 kB)
http://www.bth.se/tek/rcg.nsf/attachments/wiq_subjective_scores_excel_zip/$file/wiq_subjective_scores_excel.zip
WIQ readme file (~3 kB)
http://www.bth.se/tek/rcg.nsf/attachments/wiq_readme_zip/$file/wiq_readme.zip

Citation:

If you use the WIQ database for your research, we kindly ask you to refer to our paper [EKZ09], and also to this website [EZK10].

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References:

[EKZ09] U. Engelke, M. Kusuma, H.-J. Zepernick, M. Caldera, "Reduced-Reference Metric Design for Objective Perceptual Quality Assessment in Wireless Imaging," Signal Processing: Image Communication, vol. 24, no. 7, pp. 525-547, 2009.
[EZK10] U. Engelke, H.-J. Zepernick, and M. Kusuma, "Wireless Imaging Quality Database," http://www.bth.se/tek/rcg.nsf/pages/wiq-db, 2010.

Qualinet partner: YES

1.1.20 TU Delft Perceived Ringing Dataset

Link: http://mmi.tudelft.nl/iqlab/ringing.html

Description:

The subjective data on perceived ringing were collected with the aim to better understand where human beings perceive ringing artifacts in compressed images, and to develop a no-reference (NR) metric to predict perceived ringing annoyance in these compressed images. The data result from two perception experiments: 1. the so-called ringing region experiment, and 2. the so-called ringing annoyance experiment. For the ringing region experiment, eight source images were JPEG compressed at two levels, yielding a database of 16 stimuli. Twelve participants were requested to mark any region in each stimulus where ringing was perceived, independent of its annoyance. The results were transformed into a subjective ringing region (SRR) map, indicating where in an image on average people see ringing. For the ringing annoyance experiment, eleven source images were JPEG compressed at four levels, yielding a test database of 55 stimuli (including the originals). Twenty participants scored the annoyance of the ringing artifacts with a single-stimulus scoring method. A mean opinion score (MOS) was obtained for each stimulus.

Access:

ZIP archive, password protected, password upon request Hantao Liu (Hantao.Liu@tudelft.nl)
Link, Ringing region experiment:
http://mmi.tudelft.nl/iqlab/databases/TUD_LIVE_EyeTracking.zip
Link, Ringing annoyance experiment:
http://mmi.tudelft.nl/iqlab/databases/RingingAnnoyanceExperiment.zip

Citation:

The database containing subjective data of perceived ringing is publicly available to the research community. Please cite the following references if you use this database in your research [LKH10]. [LKH10b], [LKH10c].

References:

[LKH10] H. Liu, N. Klomp and I. Heynderickx, "A No-Reference Metric for Perceived Ringing Artifacts in Images", IEEE Transactions on Circuits and Systems for Video Technology, vol. 20, pp 529-539, April, 2010.
[LKH10b] H. Liu, N. Klomp and I. Heynderickx, "A Perceptually Relevant Approach to Ringing Region Detection", IEEE Transactions on Image Processing, vol. 19, pp. 1414-1426, June, 2010.
[LKH10c] H. Liu, N. Klomp and I. Heynderickx, "TUD Image Quality Database: Perceived Ringing", http://mmi.tudelft.nl/iqlab/ringing.html.

Qualinet partner: YES

1.1.21 A57 Image Database

Link: http://foulard.ece.cornell.edu/dmc27/vsnr/vsnr.html

Description:

It is important to note that due to the limited number of images and limited number of human subjects, the A57 database is of limited statistical reliability. It contains three reference natural images, the digital images were of size 512x512 pixels and were 8-bit grayscale with pixel values in the range 0−255. These images were distorted with six types of distortions: 1. Quantization of the LH subbands of a 5-level DWT, 2. Additive Gaussian white noise, 3. Baseline JPEG compression of the image, 4. JPEG-2000 compression of the image, 5. JPEG-2000 compression with the Dynamic Contrast-Based Quantization (DCQ) algorithm and 6. Blurring by using a Gaussian filter.

Access:

ZIP archive, no password

Link: http://foulard.ece.cornell.edu/dmc27/vsnr/a57_db.zip

Contacts:

Damon M. Chandler (damon.chandler@okstate.edu)
S. S. Hemami (hemami@ece.cornell.edu)

References:

[CH07] D. M. Chandler and S. S. Hemami, VSNR: A Wavelet-Based Visual Signal-to-Noise Ratio for Natural Images, IEEE Transactions on Image Processing, Vol. 16 (9), pp. 2284-2298, 2007.

Qualinet partner: NO

1.1.22 Multi-Sensor Images from the Collections of Manchester University

Link: http://www.imagefusion.org/images/petrovic/petrovic.html

Description:

This database contains the data from a series of subjective image fusion evaluation trials performed as a part of an image fusion research activity at the University of Manchester.

Access:

ZIP archive (~88MB), no password
Link: http://www.isbe.man.ac.uk/~vsp/Subjective_Tests_files/images.zip

Contacts:

Vladimir Petrovic (v.petrovic@manchester.ac.uk)

Copyright notice:

These images are the property of Manchester University and other organizations and may be used and published with acknowledgment.

References:

[Pet04] V. Petrovic, Subjective tests for image fusion evaluation and objective performance metric validation, submitted to the International Journal of Information Fusion, Elsevier, 2004.

Qualinet partner: NO

1.1.23 MMSPG JPEG XR Image Compression Database

Link: http://mmspl.epfl.ch/page36328.html

Description:

The new JPEG XR technology has been compared to existing JPEG and JPEG 2000 algorithms, considering compression of high resolution 24 bpp pictures, by mean of a campaign of subjective quality assessment tests which followed the general guidelines provided in the core experiment plan described in the document WG1N5001 by the AIC JPEG XR ad-hoc group. Sixteen naive subjects took part in experiments at EPFL and each subject participated in four test sessions, scoring a total of 186 test stimuli. A detailed procedure for the statistical analysis of subjective data is also proposed, which allows an accurate comparison of codec performance.

Access:

Database in ZIP archives, password protected, password upon request Lutz Goldmann (lutz.goldmann@epfl.ch).
Links:
Original images. http://documents.epfl.ch/groups/g/gr/gr-eb-unit/www/IQA/Original.zip

Training images. http://documents.epfl.ch/groups/g/gr/gr-eb-unit/www/IQA/Training.zip
Test images:
Session 1. http://documents.epfl.ch/groups/g/gr/gr-eb-unit/www/IQA/Testing1.zip
Session 2. http://documents.epfl.ch/groups/g/gr/gr-eb-unit/www/IQA/Testing2.zip
Session 3. http://documents.epfl.ch/groups/g/gr/gr-eb-unit/www/IQA/Testing3.zip
Session 4. http://documents.epfl.ch/groups/g/gr/gr-eb-unit/www/IQA/Testing4.zip
The subjective results of our test campaign are also publicly available:
Raw subjective results.
http://mmspl.epfl.ch/webdav/site/mmspl/shared/QoE/IQA/RawMatrix.zip
Mean opinion scores, standard deviation and 95% confidence intervals after outlier detection and removal. http://mmspl.epfl.ch/webdav/site/mmspl/shared/QoE/IQA/MOS_STD_CI.zip

Citation:

If you use our data for your own publications please do not forget to reference this website and our paper [DGB09].

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Contacts:

Lutz Goldmann (lutz.goldmann@epfl.ch)
Francesca DeSimone (francesca.desimone@epfl.ch)

References:

[DGB09] Francesca De Simone, Lutz Goldmann, Vittorio Baroncini and Touradj Ebrahimi, "Subjective evaluation of JPEG XR image compression", in Proceedings of SPIE 7443.

Qualinet partner: YES

1.1.24 MMSPG Subjective quality assessment database of HDR images compressed with JPEG XT

Link: http://mmspg.epfl.ch/jpegxt-hdr

Description:

Publicly available dataset of 20 HDR images, covering typical use cases and acquisition methods, including fusion from several images with different exposures, frames from HDR video, and CGI images. Some of the original images were taken from other public datasets, but the HDR images were re-generated and then adapted (resized, cropped, and tone-mapped using display-adaptive tone-mapping operator) to SIM2 HDR monitor. The dataset provides compressed versions of the display-adapted HDR images by three JPEG~XT profiles, referred to as profiles A, B, and C. The encoding parameters of the compressed images were carefully selected by the expert viewers using SIM2 HDR monitor to ensure four different bit rate levels similar for the three profiles. The dataset also includes the MOS values obtained from the subjective evaluation of HDR images compressed using three profiles, which was conducted in a specialized test laboratory using Double Stimulus Impairment Scale (DSIS) methodology and 24

naive subjects. The proposed dataset, to the best of our knowledge, is the most extensive public dataset of HDR images compressed with all three profiles of JPEG~XT and with the corresponding MOS values.

Access:

Link:
http://mmspg.epfl.ch/jpegxt-hdr

Citation:

If you use this dataset in your research, we kindly ask you to reference our paper [KHR15] and URL link (http://mmspg.epfl.ch/jpegxt-hdr)

Contacts:

Philippe Hanhart (philippe.hanhart@epfl.ch)

References:

[KHR15] P. Korshunov, P. Hanhart, T. Richter, A. Artusi, R. Mantiuk, and T. Ebrahimi, "Subjective quality assessment database of HDR images compressed with JPEG XT," 7th International Workshop on Quality of Multimedia Experience (QoMEX), Costa Navarino, Messinia, Greece, May 26-29, 2015.

Qualinet partner: YES

1.1.25 MMSPG 3D Image Quality Assessment Database

Link: http://mmspg.epfl.ch/3diqa

Description:

The database contains stereoscopic images with a resolution of 1920x1080 pixels. Various indoor and outdoor scenes with a large variety of colors, textures, and depth structures have been captured. Each of the scenes has been captured with different camera distances in the range 10-50 cm. Since the acquisition was done in a sequential way the content of a single scene may vary slightly across the different camera distance. However, the general 2D (color, texture, motion) and 3D (depth) characteristics are preserved. The database contains 10 scenes, shown in the figure below, with difference characteristics.

Access:

Database in ZIP archives, password protected, password upon request Philippe Hanhart (philippe.hanhart@epfl.ch).
Links:
Captured left and right images: Individual Images stored as JPG files
https://ltslinux18.epfl.ch/~goldmann/3diqa/LeftImages.zip
https://ltslinux18.epfl.ch/~goldmann/3diqa/RightImages.zip
Processed stereo images: LR image pairs stored as single PNG files
https://ltslinux18.epfl.ch/~goldmann/3diqa/ProcessedImages.zip
Raw subjective quality scores: List of 54 images and the 54x17 score matrix as CSV files
http://ltslinux18.epfl.ch/~goldmann/3diqa/RawScores.zip
Mean opinion scores and confidence intervals: 54x1 mean opinion score and confidence intervals as CSV file
http://ltslinux18.epfl.ch/~goldmann/3diqa/MosCi.zip

Citation:

If you use this database in your research we kindly ask you to reference this website and the paper below [GDE10].

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Contacts:

Philippe Hanhart (philippe.hanhart@epfl.ch)

References:

[GDE10b] Lutz Goldmann, Francesca De Simone, Touradj Ebrahimi: "Impact of Acquisition Distortions on the Quality of Stereoscopic Images", 5th International Workshop on Video Processing and Quality Metrics for Consumer Electronics (VPQM), Scottsdale, USA, 2010.

Qualinet partner: YES

1.1.26 MPEG 3D-AVC verification test

Description:

Database used for the MPEG 3D-AVC verification test. A total of 4 multiview video plus depth (MVD) sequences were encoded with MVC+D and 3D-AVC at 4 rate points. From the original and decoded data, 2 sets of stereo pairs were generated: 1 pair with 1 decoded view and 1 synthesized view; 1 pair with 2 synthesized views. The database contains a total of 72 stereo pairs. The stereo pairs were evaluated by two different labs using different stereoscopic monitors: 24 subjects evaluated all stereo pairs at FUB on a LG 47”, and 22 subjects evaluated all stereo pairs at EPFL on a Hyundai S465D 46”. The purpose of this database is to benchmark objective metrics.

Access:

The database is available to Qualinet members only. To access the database, please send an email to Philippe Hanhart (philippe.hanhart@epfl.ch)

Contacts:

Philippe Hanhart (philippe.hanhart@epfl.ch)

References:

[ITU13] ITU-T SG16 WP3 and ISO/IEC JTC1/SC29/WG11, 3D Video Subjective Quality Assessment Test Plan, Doc. JCT3V-F1011, Geneva, Switzerland, October 2013.
[ITU14] ITU-T SG16 WP3 and ISO/IEC JTC1/SC29/WG11, Report of 3D-AVC Subjective Quality Assessment, Doc. JCT3V-G1011, San Jose, USE, January 2014.

Qualinet partner: YES

1.1.27 LIRIS/EPFL 3D Model General-Purpose database

Link: http://liris.cnrs.fr/guillaume.lavoue/data/datasets.html

Description:

The package contains: the 3D models of the corpus, the subjective opinion scores given by the observers and the values from several objective metrics. 88 models between 40K and 50K vertices were generated from 4 reference objects. Two types of distortion (noise addition and smoothing) were applied with different strengths and at four locations: on the whole model, on smooth areas, on rough areas and on intermediate areas. Subjective evaluations were made at normal viewing distance, using a SSIS (Single Stimulus Impairment Scale) method with 12 observers. A Microsoft excel document giving all subjective quality scores is included in the above archive. It contains also Mean Opinion Scores after normalization and outlier removal. An other Microsoft excel document provides the objective scores of several recent perceptual metrics from the state of the art.

Access:

ZIP archive (~90MB):
Link: http://liris.cnrs.fr/guillaume.lavoue/data/LIRIS_EPFL_GenPurpose.zip

Citation:

This database was created at EPFL and experiments were conducted at EPFL and LIRIS, Université de Lyon. It you use it, please cite [LDD06].

Contacts:

Guillaume Lavoué (glavoue@liris.cnrs.fr)

References:

[LDD06] Lavoue G, Drelie Gelasca E, Dupont F, Baskurt A, Ebrahimi T. Perceptually driven 3D distance metrics with application to watermarking. In: Proceedings of SPIE.Vol 6312. SPIE; 2006:63120L-63120L-12.
[LC10b] Lavoué G, Corsini M. A comparison of perceptually-based metrics for objective evaluation of geometry processing. IEEE Transactions on Multimedia. 2010;12(7):636-649.

Qualinet partner: YES

1.1.28 LIRIS 3D Model Masking database

Link: http://liris.cnrs.fr/guillaume.lavoue/data/datasets.html

Description:

The package contains: 26 models between 9K and 40K vertices were generated from 4 reference objects. The only distortion is noise addition applied with three strengths, either on smooth or rough regions. Subjective evaluations were made at normal viewing distance, using a Multiple Stimulus Impairment Scale method with 11 observers. A Microsoft excel document giving all subjective quality scores is included in the above archive. It contains also Mean Opinion Scores after normalization and outlier removal. An other Microsoft excel document provides the objective scores of several recent perceptual metrics from the state of the art.

Access:

ZIP archive (~18MB):
Link: http://liris.cnrs.fr/guillaume.lavoue/data/LIRIS_Mask.zip

Citation:

The database was created at LIRIS, Université de Lyon. It you use it, please cite [Lav09].

Contacts:

Guillaume Lavoué (glavoue@liris.cnrs.fr)

References:

[Lav09] Lavoué G. A local roughness measure for 3D meshes and its application to visual masking. ACM Transactions on Applied Perception (TAP). 2009;5(4).
[LC10b] Lavoué G, Corsini M. A comparison of perceptually-based metrics for objective evaluation of geometry processing. IEEE Transactions on Multimedia. 2010;12(7):636-649.

Qualinet partner: YES

1.1.29 Distortion of Radial Images for Visual Enhancement (DRIVE)

Link: http://www.eee.nuigalway.ie/Research/car/students/awinterlich/index.html

Description:

Distortion of Radial Images for Visual Enhancement (DRIVE) is an image database consisting of 48 automotive images and corresponding subjective opinion scores used to evaluate the effect of fish-eye to rectilinear distortions on perceptual quality in the automotive environment.

Access:

Please contact the authors for access to the dataset:
Anthony Winterlich (anthony.winterlich@gmail.com)

Citation:

Please cite the following paper in your reference if you use this Database for your work [WZD13].

Contacts:

Anthony Winterlich (anthony.winterlich@gmail.com)

References:

[WZD13] A. Winterlich, V. Zlokolica, P. Denny, L. Kilmartin, M. Glavin, E. Jones: A Saliency Weighted No-Reference Perceptual Blur Metric for the Automotive Environment, QoMEX 2013.

Qualinet partner: NO

1.1.30 Image dataset for comparison of subjective methods for image quality assessment

Link: http://pages.bangor.ac.uk/~eesa0c/projects/subjective_metrics/

Description:

The major methods for data analysis are reviewed, such as establishing confidence intervals, statistical testing and retrospective power analysis. Two methods of visualizing ranking results together with the meaningful information about the statistical and practical significance are explored. Four most prominent subjective quality assessment methods are compared: single-stimulus, double-stimulus, forced-choice pairwise comparison, and similarity judgements. Selected 10 images from the Kodak Photo CD photo sampler collection are used in the experiment.

Access:

Images used in the experiment are available at:
Links: http://pages.bangor.ac.uk/~eesa0c/projects/subjective_metrics/images_index.html
The ZIP file contains all images used to measure quality in the study, both distorted and test images:
Link: http://pages.bangor.ac.uk/~eesa0c/projects/subjective_metrics/images.zip

Experiemntal data are available in the CSV format:
Link: http://pages.bangor.ac.uk/~eesa0c/projects/subjective_metrics/data/index.html

Citation:

We do not restrict any rights to use the data sets as long as the original publication and the source of the data is referred [MTM12].

Contacts:

Rafał K. Mantiuk (mantiuk@gmail.com)

References:

[MTM12] Rafał K. Mantiuk, Anna Tomaszewska, and Radosław Mantiuk, Comparison of four subjective methods for image quality assessment, Computer Graphics Forum, 31(8), pp. 2478–2491, 2012.

Qualinet partner: NO

1.1.31 Image dataset for evaluation of graphics artifacts

Link: http://www.mpi-inf.mpg.de/resources/hdr/iqm-evaluation/dataset.html

Description:

Reliable detection of global illumination and rendering artifacts in the form of localized distortion maps is important for many graphics applications. Two experiments were run where observers use a brush-painting interface to directly mark image regions with noticeable/objectionable distortions in the presence/absence of a high-quality reference image, respectively. The collected data shows a relatively high correlation between the with-reference and no-reference observer markings. The demanding perpixel image-quality datasets reveal weaknesses of both simple (PSNR, MSE, sCIE-Lab) and advanced (SSIM, MS-SSIM, HDRVDP-2) quality metrics. The datasets have further potential in improving existing quality metrics, but also in analyzing the saliency of rendering distortions, and investigating visual equivalence given our with- and no-reference data. Stimuli #1 - #10 come from EG 12 dataset, for the dataset SIGGRAPH Asia 12 a similar but more extensive experiment has been performed (stimuli #11 - #37) in a more rigorous setup. All scenes were rendered into high-dynamic-range images and tone mapped for display.

Access:

Images used in the experiment are available at:
Links: http://www.mpi-inf.mpg.de/resources/hdr/iqm-evaluation/dataset.html
Download SIGGRAPH Asia 12 dataset (including experimental study results, 195MB zip file):
Link: http://www.mpi-inf.mpg.de/resources/hdr/iqm-evaluation/loccg_sa12.zip
Browse SIGGRAPH Asia 12 dataset:
Link: http://www.mpi-inf.mpg.de/resources/hdr/iqm-evaluation/loccg_sa12/
Download EG 12 dataset (including experimental study results, 113MB zip file):
Link: http://www.mpi-inf.mpg.de/resources/hdr/iqm-evaluation/loccg_eg12.zip
Browse EG 12 dataset:
Link: http://www.mpi-inf.mpg.de/resources/hdr/iqm-evaluation/loccg_eg12/

Citation:

Please refer to the paper entitled [CHM12] for additional information.

Contacts:

Martin Cadik (mcadik@mpi-inf.mpg.de)

References:

[CHM12] Martin Cadik, Robert Herzog, Rafal Mantiuk, Karol Myszkowski, Hans-Peter Seidel, New Measurements Reveal Weaknesses of Image Quality Metrics in Evaluating Graphics Artifacts, ACM Transactions on Graphics (Proc. of SIGGRAPH Asia), 2012.

Qualinet partner: NO

1.1.32 MPI HDR Image Gallery

Link: http://www.mpi-inf.mpg.de/resources/hdr/gallery.html

Description:

The dataset contains 7 HDR images in OpenEXR created by Frédéric Drago and Rafal Mantiuk.

Access:

OpenEXR images are available at:
Link: http://www.mpi-inf.mpg.de/resources/hdr/gallery.html
Direct links to OpenEXR files:
Link: http://www.mpi-inf.mpg.de/resources/hdr/img_hdr/AtriumMorning.exr
Link: http://www.mpi-inf.mpg.de/resources/hdr/img_hdr/AtriumNight.exr
Link: http://www.mpi-inf.mpg.de/resources/hdr/img_hdr/Iwate.exr
Link: http://www.mpi-inf.mpg.de/resources/hdr/img_hdr/snow.exr
Link: http://www.mpi-inf.mpg.de/resources/hdr/img_hdr/nancy_cathedral_1.exr
Link: http://www.mpi-inf.mpg.de/resources/hdr/img_hdr/nancy_cathedral_2.exr
Link: http://www.mpi-inf.mpg.de/resources/hdr/img_hdr/mpi_atrium_1.exr

Contacts:

Rafał K. Mantiuk (mantiuk@gmail.com)

Qualinet partner: NO

1.1.33 Image dataset for HDR metric calibration

Link: http://sourceforge.net/apps/mediawiki/hdrvdp/index.php

Description:

HDR-VDP is a visual metric that compares a pair of images (a reference and a test image) and predicts. The metric can be used for testing fidelity (e.g. how distracting are image compression distortions), or visibility (is the information sufficiently visible). The great care was taken to calibrate the HDR-VDP-2 with the experimental data. The selected data sets are planned to be released so that others can benchmark their metrics against HDR-VDP-2.

Access:

The dataset is available upon request:
Rafał Mantiuk (mantiuk@gmail.com)

Citation:

If you find the HDR-VDP metric useful, please cite the paper below and include the version number, for example HDR-VDP-2.1.3 [MKR11].

Contacts:

Rafał Mantiuk (mantiuk@gmail.com)

References:

[MKR11] Rafał Mantiuk, Kil Joong Kim, Allan G. Rempel and Wolfgang Heidrich, HDR-VDP-2: A calibrated visual metric for visibility and quality predictions in all luminance conditions, ACM Transactions on Graphics (Proc. of SIGGRAPH 11), 2011.

Qualinet partner: NO

1.1.34 High Dynamic Range Imaging Dataset of Natural Scenes

Link: http://white.stanford.edu/~brian/hdr/hdr.html

Description:

This dataset contains the HDR data (including illuminant) of 88 images, Matlab files that read the HDR data and produce the summary images, the sensor spectral QE, example script for reading and analyzing the data. For each HDR image, it is provided: Luminance histogram (PDF), Illuminant spectral power distribution (PDF), Highly compressed and sub-sampled rgb image, Pseudo-color image showing (50 x log luminance) (cd/m^2).

Access:

Images used in the experiment are available with thumbnails at:
Link: http://white.stanford.edu/~brian/hdr/hdr.html
The ZIP (134MB) file contains HDR data, Matlab files that read the HDR, the sensor spectral QE and example script for reading and analyzing the data:
Link: http://white.stanford.edu/~brian/hdr/hdrStanfordData.zip

Citation:

Please refer to the paper entitled [XDC02] for additional information.

Contacts:

Brian A. Wandell (https://www.stanford.edu/group/vista/cgi-bin/wandell/, Wandell@stanford.edu)

References:

[XDC02] F. Xiao, J. DiCarlo, P. Catrysse and B. Wandell, High Dynamic Range Imaging of Natural Scenes, In Tenth Color Imaging Conference: Color Science, Systems, and Applications. Scottsdale, AZ, 2002.

Qualinet partner: NO

1.1.35 Recovering HDR Radiance Maps from Photographs Dataset

Link: http://www.pauldebevec.com/Research/HDR/

Description:

There are 6 well known radiance map images created by Greg Ward. Five of them are available in HDR and one in HDR and OpenEXR file formats. Moreover there are 9 light probe images available in HDR file format.

Access:

Dataset of Greg Ward's radiance maps with preview of tone mapped images is available at:
Link: http://www.pauldebevec.com/Research/HDR/
Light probe images are available at:
Link: http://www.pauldebevec.com/Probes/

Citation:

The reference for the paper that produced these images is [DM97] for Grag Ward's images and [Dev98] for light probe images.

Contacts:

Paul Debevec (http://www.pauldebevec.com/, paul@debevec.org)

References:

[DM97] Paul E. Debevec and Jitendra Malik. Recovering High Dynamic Range Radiance Maps from Photographs. In SIGGRAPH 97, August 1997.
[Dev98] Paul Debevec. Rendering Synthetic Objects Into Real Scenes: Bridging Traditional and Image-Based Graphics With Global Illumination and High Dynamic Range Photography, Proceedings of SIGGRAPH 98, pp. 189-198 (July 1998, Orlando, Florida).

Qualinet partner: NO

1.1.36 HDR Image Dataset for Photometric Stereo

Link: http://vision.ucsd.edu/~nalldrin/research/cvpr08/datasets/

Description:

The dataset contains 312 HDR images of 3 objects. Images were acquired in a dark room using an EOS-1Ds camera with a fixed zoom lens. The camera was placed roughly 1.5m from the test object (~10cm in diameter). All images were acquired with the camera and test object in the same position. Illumination consisted of a single incandescent light bulb placed roughly 1.5m from the test object (whose position was varied in each image). Light source directions were measured with a mirrored sphere placed in the scene and light source intensity was measured with a diffuse sphere placed in the scene. Each image in the dataset is actually the result of multiple RAW images captured by the camera. To prevent clipping of bright and dark regions of the scene, we combined multiple low dynamic range (LDR) images taken at different shutter speeds into a single high dynamic range (HDR) image. To eliminate ambient illumination (which is present even in a dark room to some degree), we acquired ambient images by occluding the light source relative to the test object (i.e., we blocked the light source so that the test object was in shadow, so that only ambient light illuminated the object). The images present in the dataset are the difference between normal images and their corresponding ambient images.

Access:

Dataset is available with image preview at:
Link: http://vision.ucsd.edu/~nalldrin/research/cvpr08/datasets/
HDR images of three objects are available for various illuminations:
APPLE image, 112 images, resolution: 646x696
Link: http://vision.ucsd.edu/~nalldrin/research/cvpr08/datasets/apple.tar.gz
GOURD1 image, 102 images, resolution: 552x588
Link: http://vision.ucsd.edu/~nalldrin/research/cvpr08/datasets/gourd1.tar.gz
GOURD2 image, 98 images, resolution: 601x501
Link: http://vision.ucsd.edu/~nalldrin/research/cvpr08/datasets/gourd2.tar.gz

Citation:

The images provided in these dataset are free to use so long as proper credit is attributed to the original authors. In particular, any publications utilizing this dataset should cite the following paper [AZK08].

Contacts:

Neil Alldrin (http://vision.ucsd.edu/~nalldrin/, nalldrin@gmail.com)

References:

[AZK08] N. Alldrin, T. Zickler, and D. Kriegman, Photometric Stereo With Non-Parametric and Spatially-Varying Reflectance, 2008 Conf. on Comp. Vision and Pattern Recognition (CVPR), Anchorage, AK, June 2008.

Qualinet partner: NO

1.1.37 UFRJ Blurred Image Database

Link: http://www02.smt.ufrj.br/~eduardo/eduardo_oficial/ImageDatabase.htm

Description:

High-resolution database containing 6000 images corrupted with simulated blur and 585 images taken by humans, containing a variety of real blurring scenarios, with ratings from users.

Access:

The files are available for download via HTTP.
Link: http://www02.smt.ufrj.br/~eduardo/eduardo_oficial/ImageDatabase.htm
Archive file with all the images (424MB) as well as the grades:
Link: http://www02.smt.ufrj.br/~eduardo/eduardo_oficial/ImageDatabase.tgz
For individual images:
Link: http://www02.smt.ufrj.br/~eduardo/eduardo_oficial/ImageDatabase/

References:

[CCS11] Ciancio, A. G., da Costa, A. L. N. T., da Silva, E. A. B., Said, A., Samadani, R., Obrador, P., No-Reference Blur Assessment of Digital Pictures Based On Multi-Feature Classifiers. IEEE Transactions on Image Processing, 20(1), pp. 64-75, January 2011.

Qualinet partner: NO

1.1.38 VCL@FER image quality assessment database

Link: http://www.vcl.fer.hr/quality/vclfer.html

Description:

VCL@FER database consists of 575 images, 23 out of which are originals, with 4 different degradation types per image and 6 degrees of degradation. The degradation types are: JPEG2000, JPEG, Gaussian noise, White noise. Testing was conducted on 118 subjects who had to grade 11307 images in total (around 96 images per subject). Every image was evaluated between 16 and 36 times. Every subject had to grade different types of degradation in one session, e.g. sessions were not divided on degradation types. This will influence on objective measure performances. Mean Opinion Score (MOS) was calculated according to the Rec. ITU-R BT.500-11.

Access:

The images are available for download via HTTP.
Link: http://www.vcl.fer.hr/quality/vlc@fer.rar
MOS results:
Link: http://www.vcl.fer.hr/quality/results.xls

Citation:

All documents and papers that report research results obtained using the VCL@FER database will acknowledge the use of the VCL@FER database. Please cite the following paper [ZTB12].

Copyright notice:

You can download the VCL@FER database here under the following terms:
(1) The VCL@FER database will not be further distributed, published, copied, or further disseminated in any way or form whatsoever, whether for profit or not. This includes further distributing, copying or disseminating to a facility or organization unit in the requesting university, organization, or company. VCL@FER images may be used to create new images but the downloaded images will not be modified.
(2) All the images will be used for the purpose of academic or scientific research only. The VCL@FER database, in whole or in part, will not be used for any commercial purpose in any form. Commercial distribution or any act related to commercial use of this database is strictly prohibited.
(3) All documents and papers that report research results obtained using the VCL@FER database will acknowledge the use of the VCL@FER database. Please cite the following paper:
A.Zaric, N.Tatalovic, N.Brajkovic, H.Hlevnjak, M.Loncaric, E.Dumic, S.Grgic, ""VCL@FER Image Quality Assessment Database, AUTOMATIKA Vol. 53, No. 4, pp. 344–354, 2012
(4) While every effort has been made to ensure accuracy, VCL@FER database owners cannot accept responsibility for errors or omissions.
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(6) VCL@FER database owners reserve the right to revise, amend, alter or delete the information provided herein at any time, but shall not be responsible for or liable in respect of any such revisions, amendments, alterations or deletions.

Contacts:

Sonja Grgic (sonja.grgic@fer.hr)

References:

[ZTB12] A.Zaric, N.Tatalovic, N.Brajkovic, H.Hlevnjak, M.Loncaric, E.Dumic, S.Grgic, VCL@FER Image Quality Assessment Database, AUTOMATIKA Vol. 53, No. 4, pp. 344–354, 2012.

Qualinet partner: YES

1.1.39 CID2013 Camera Image Database

Link: http://www.helsinki.fi/~msjnuuti/CID2013/

Description:

The CID2013 Camera Image Database consists of real images taken by consumer cameras and mobile phones. It is developed to provide useful tool to allow researchers target more commercially relevant distortions when developing processes of objective image quality assessment algorithms. The CID2013 database consists of 480 images captured by 79 imaging devices (mobile phones, DSC, DSLR) in six Image Sets. The images are evaluated by 188 observers using Dynamic Reference (DR-ACR) method (explained below). A separate scale realignment ACR data consisting evaluations from 34 observers is also included that allows to combine the data from the six image sets.

Access:

Database is password protected. If you are interesting to download the database, please contact Toni Virtanen (toni.virtanen@helsinki.fi). You may download the database from the link below.

Link:
http://www.helsinki.fi/~msjnuuti/CID2013/CID2013.zip

Citation:

If you use these images in your research, we kindly ask that you follow the copyright notice and cite the following paper [VNV15].

Copyright notice:

Permission is hereby granted, without written agreement and without license or royalty fees, to use, copy, modify, and distribute this database (the videos, the images, the results and the source files) and its documentation for any purpose, provided that the copyright notice in its entirely appear in all copies of this database, and the original source of this database,Visual Cognition research group (www.helsinki.fi/psychology/groups/visualcognition/index.htm) and the Institute of Behavioral Science (www.helsinki.fi/ibs/index.html) at the University Helsinki (www.helsinki.fi/university/), is acknowledged in any publication that reports research using this database. Individual videos and images may not be used outside the scope of this database (e.g. in marketing purposes) without prior permission.

Contacts:

Toni Virtanen (toni.virtanen@helsinki.fi)

References:

[VNV15] Virtanen, T., Nuutinen, M., Vaahteranoksa, M., Oittinen, P. and Häkkinen, J. CID2013: a database for evaluating no-reference image quality assessment algorithms, IEEE Transactions on Image Processing, vol. 24, no. 1, pp. 390-402, Jan. 2015.

Qualinet partner: NO

1.1.40 Subject-rated image database for tone-mapped images

Link: https://ece.uwaterloo.ca/~z70wang/research/tmqi/

Description:

Tone mapping operators (TMOs) that convert high dynamic range (HDR) to low dynamic range (LDR) images provide practically useful tools for the visualization of HDR images on standard LDR displays. Different TMOs create different tone mapped images, and a natural question is which one has the best quality. A straight-forward approach is to invite human subjects to rate or rank the quality of tone-mapped images. This database provides 15 image sets, each of which contains an HDR image along with 8 tone-mapped images created by different TMOs.

Access:

The data is available without having a permission.
Link: https://ece.uwaterloo.ca/~z70wang/research/tmqi/

Citation:

Please, cite the following paper in your reference if you use this database for your work [YW13].

Contacts:

Hojatollah Yeganeh (hyeganeh@uwaterloo.ca)
Zhou Wang (z.wang@eceweb.uwaterloo.ca)

References:

[YW13] H. Yeganeh and Z. Wang, Objective Quality Assessment of Tone Mapped Images, IEEE Transactions on Image Processing, vol. 22, no. 2, pp. 657-667, Feb. 2013.

Qualinet partner: NO

1.2 Annotated Video Quality Databases

1.2.1 VQEG FR-TV Phase I Database

Link: ftp://ftp.crc.ca/crc/vqeg/TestSequences/

Description:

The oldest public database on video quality is VQEG FR-TV Phase I Database [VQE00]. In this case the test conditions are focused on MPEG-2 compression typical distortions.

Access:

Link: ftp://ftp.crc.ca/crc/vqeg/TestSequences/

References:

[VQE00] VQEG: Final report from the Video Quality Experts Group on the validation of objective models of video quality assessment. April 2000. http://www.vqeg.org

Qualinet partner: LIAISON

1.2.2 VQEG HDTV Database

Link: www.cdvl.org

Description:

The video sequences from the VQEG HDTV dataset 1 (vqeghd1) is available on the Consumer Digital Video Library (www.cdvl.org). VQEG HDTV dataset 2 (vqeghd2) will be available soon. The subjective data, objective data, and test description are available in the HDTV Final Report, on the VQEG website at http://www.its.bldrdoc.gov/vqeg/projects/hdtv/.

Access:

Registration required
Link: http://www.cdvl.org/

Qualinet partner: LIAISON

1.2.3 Poly@NYU Video Quality Database

Link:
http://vision.poly.edu/index.html/index.php?n=HomePage.ScalableVideoQualityWithFrameRateAndQuantizationArtifacts

Description:

There are two annotated databases available from the Video Lab at the Polytechnic Institute of the New York University. The first Video Quality Database (PolyNYU VQ) is focused on evaluation of scalable video coding with frame rate and quantization artifacts. The subjective quality is carried out using a protocol similar to ACR-HR (Absolute Category Rating with Hidden Reference). There are 31 viewers participating in the test, and a total 20 ratings for each Processed Video Sequence (PVC) after data post-processing.

Access:

RAR archives, password protected, password upon request Yen-Fu Ou (you01@students.poly.edu)

Subjective Database Release 1
http://vision.poly.edu/yenfu/Welcom_Yen-Fu_Ou_homepage/QA_Data_base_files/CIF_QCIF_score_20090505.rar
Testing Sequences Release 1
http://vision.poly.edu/~tliu/Tested352x288%20Seq.rar
http://vision.poly.edu/~tliu/Tested176x144%20Seq.rar

Subjective Database Release 2
http://vision.poly.edu/yenfu/Welcom_Yen-Fu_Ou_homepage/QA_Data_base_files/temporal_quantization_score_20090505.rar
Testing Sequences Release 2
http://vision.poly.edu/yenfu/QADatabase/VPQM09_seqs

Subjective Database Release 3
http://vision.poly.edu/yenfu/Welcom_Yen-Fu_Ou_homepage/QA_Data_base_files/ICASSP10_datasets.rar
Testing Sequences Release 3
http://vision.poly.edu/yenfu/QADatabase/ICASSP10_seqs

References:

[OLZ08] Y.-F Ou, T. Liu, Z. Zhao, Z. Ma, Y. Wang " Modeling the Impact of Frame Rate on Perceptual Quality of Video", IEEE International Conference on Image Processing (ICIP'08), San Diego, CA, USA, Oct. 12-15, 2008, pp. 689-692.
[OMW09] Y.-F Ou, Z. Ma, Y. Wang " A Novel Quality Metric for Compressed Video Considering both Frame Rate and Quantization Artifacts", International Workshop on Image Processing and Quality Metrics for Consumer (VPQM'08), Scottsdale, AZ, USA, Jan. 15-16, 2009.
[OZW10] Y.-F Ou, Y. Zhou, Y. Wang " Perceptual Quality of Video with Frame Rate Variation:A Subjective Study", IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP10'), Dallas, TX, USA, March 14 – 19, 2010.

Qualinet partner: NO

1.2.4 Poly@NYU Video Quality Database Packet Loss Database

Link:
http://vision.poly.edu/index.html/index.php?n=HomePage.PerceptualVideoQualityInPresenceOfPacketLoss

Description:

Smaller dataset investigates the impact of packet loss in H.264 videos (PolyNYU PL). This subjective data consist of two parts: one is for quality evaluation of individual loss-impaired frames, and the other is for quality evaluation of entire loss-impaired segments (due to error propagation). A total of 17 videos are selected from wide variety of standard test sequences, and rated by 32 viewers. The subjective test is performed adopting the ACR-HR 5 scale standard. These subjective tests mainly target the low bitrate video application. The test videos are encoded/decoded adopting H.264 standard. During each loss event, one entire frame is lost, and frame-copy error concealment is utilized.

Access:

RAR archive, password protected, password upon request Tao Liu (taoliu.bit@gmail.com).
Link: http://vision.poly.edu/~tliu/PL_dataset.zip

References:

[LWB09] T. Liu, Y. Wang, J. Boyce, H. Yang, and Z. Wu, "A Novel Video Quality Metric for Low Bit-rate Video Considering both Coding and Packet-loss Artifacts", Special Issue on Visual Media Quality Assessment, IEEE Journal of Selected Topics in Signal Processing, Vol.3 No. 2, pp.280~293, April 2009.
[LWB07] Liu, Tao; Wang, Yao; Boyce, Jill M.; Wu, Zhenyu; Yang, Hua; "Subjective Quality Evaluation of Decoded Video in the Presence of Packet Losses," IEEE Conf. Acoustics, Speech and Signal Processing, April 2007. (ICASSP 2007). Volume 1, Page(s):I-1125 - I-1128.
[FLY08] Xin Feng, Tao Liu, Dan Yang, and Yao Wang, "Saliency Based Objective Quality Assessment of Decoded Video Affected by Packet Losses", in Proceedings of IEEE ICIP, San Diego, CA, October 2008.
[LFR09] Tao Liu, Xin Feng, Amy Reibman, and Yao Wang, "Saliency Inspired Modeling of Packet-loss Visibility in Decoded Videos", Proceedings of Video Perceptual Quality Metric, 2009

Qualinet partner: NO

1.2.5 IRCCyN/IVC 1080i Database

Link: http://www.irccyn.ec-nantes.fr/spip.php?article541

Description:

This database contains several reference HD videos (no processing or degradation) and seven different compressed videos (H.264 compression). There is one spreadsheet that contains the individual score and the MOS for each video for the SAMVIQ and ACR methodologies. The HRC is h264 coding with the JM coder version 7.5. A pretest with experts was done to find 7 bit-rates to have 7 different subjective scores. So, the bit-rates are not always the same and depend on the contents. The bit-rates are selected to have minimum quality in relation to the target, HD resolution.

Access:

Video sequences at FTP, no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_1080i_Database/

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_1080i_Database
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [PPL08].

References:

[PPL08] Stéphane Péchard, Romuald Pépion, Patrick Le Callet, Suitable methodology in subjective video quality assessment: a resolution dependent paradigm, International Workshop on Image Media Quality and its Applications, IMQA2008, Kyoto : Japan (2008).

Qualinet partner: YES

1.2.6 IRCCyN/IVC VQEG HDTV Pool2 1080i Videos database

Link: http://130.66.64.103/spip.php?article775

Description:

This database contains 168 videos sequences, the subjective results and auxiliary data such as the transmitted video files. 9 different video source contents were used. For each content, the reference (without degradation) and 15 different degradations called Hypothetical Reference Circuits (HRCs) were subjectively evaluated. The HRCs are based on H.264 and MPEG2 coding with and without transmission errors. We provide a spreadsheet with the individual scores and the Mean Opinion Score (MOS) for each of the 168 Processed Video Sequences (PVS).

Access:

The PVS (avi videos) and the bitstreams (H.264 and MPEG2 files) are available for download free of charge on the Consumer Digital Video Library (www.cdvl.org) due to copyright restrictions of the source content. They can be identified as being part of the VQEG HDTV dataset 2 (vqeghd2). In order to access them, use the CDVL search function with : ""Subjective Experiment vqeghd2"" and select ""Match all"".
Spreadsheet with the individual scores and the Mean Opinion Score (MOS) for each of the 168 Processed Video Sequences (PVS):
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/VQEG_HDTV_Pool2/VQEG_HDTV_Pool2_Database_Score.xls
Bitstreams (hmix and pcap files) on ftp server:
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/VQEG_HDTV_Pool2/

Citation:

Please, cite the following paper in your publications if you use this database in your work [BPP10].

References:

[BPP10] Marcus Barkowsky, Margaret Pinson, Romuald Pépion, Patrick Le Callet, Analysis of Freely Available Dataset for HDTV including Coding and Transmission Distortions, Fifth International Workshop on Video Processing and Quality Metrics (VPQM), Scottsdale, January 2010.

Qualinet partner: YES

1.2.7 IRCCyN/IVC SD RoI Database

Link: http://www.irccyn.ec-nantes.fr/spip.php?article551

Description:

This database contains the videos and associated subjective scores. The videos are provided with various content and H.264 coding with or without error transmission simulations. The H.264 distorted videos are also provided. There is one spreadsheet with the individual score and the MOS for each video. The bit-rates are selected to have a good quality if we are not aware of the transmission errors.

Access:

Video sequences at FTP, no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_SD_RoI_Database/

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_SVC4QoE_QP0_QP1
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [BCP09].

References:

[BCP09] Fadi Boulos, Wei Chen, Benoît Parrein, Patrick Le Callet, Region-of-Interest Intra Prediction for H.264/AVC Error Resilience, IEEE International Conference on Image Processing, Cairo : Egypt (2009).

Qualinet partner: YES

1.2.8 IRCCyN/IVC SVC4QoE Replace Slice Video Database

Link: http://www.irccyn.ec-nantes.fr/spip.php?article768

Description:

This database contains 9 contents with for each content, the reference (without processing or degradation) and 14 different HRCs. The HRCs are h264 and h264/SVC with simulated transmission errors. Several error concealments was tested using the h264/SVC capability. There is one spreadsheet with the individual score and the MOS for each video for the results of subjective test using ACR methodology. A text file presents the conditions in which the videos was evaluated.

Access:

Video sequences at FTP:
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_SVC4QoE_ReplaceSlice/

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_SVC4QoE_ReplaceSlice
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [PBL10].

References:

[PBL10] Yohann Pitrey, Marcus Barkowsky, Patrick Le Callet, Romuald Pépion, "Evaluation of MPEG4-SVC for QoE protection in the context of transmission errors", SPIE Optical Engineering, San Diego, 2010.

Qualinet partner: YES

1.2.9 IRCCyN/IVC SVC4QoE QP0 QP1 Video Database

Link: http://www.irccyn.ec-nantes.fr/spip.php?article769

Description:

This database contains 11 contents with for each content, the reference (without processing or degradation) and 29 different HRCs. The HRCs are h264 and h264/SVC. Several QP repartition are tested between the base layer of the SVC stream and the enhancement layer. There is one spreadsheet with the individual score and the MOS for each video for the results of subjective test using ACR methodology. A text file presents the conditions in which the videos was evaluated.

Access:

Video sequences at FTP:
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_SVC4QoE_QP0_QP1/

Citation:

Please, cite the following paper in your reference if you use this database for your work [PEB11].

References:

[PEB11] Yohann Pitrey, Ulrich Engelke, Marcus Barkowsky, Romuald Pépion, Patrick Le Callet, "Aligning subjective tests using a low cost common set", Euro ITV QoEMCS, Lisbon, 2011.

Qualinet partner: YES

1.2.10 IRCCyN/IVC SVC4QoE Temporal Switch Video Database

Link: http://www.irccyn.ec-nantes.fr/spip.php?article770

Description:

This database contains 11 contents with for each content, the reference (without processing or degradation) and 36 different HRCs. The HRCs are h264 and h264/SVC. Several switching conditions were created between the base layer and the enhancement layer. There is one spreadsheet with the individual score and the MOS for each video for the results of subjective test using ACR methodology. A text file presents the conditions in which the videos was evaluated.

Access:

Video sequences at FTP:
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_SVC4QoE_Temporal_Switch/

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_SVC4QoE_Temporal_Switch
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [PEL11].

References:

[PEL11] Yohann Pitrey, Ulrich Engelke, Patrick Le Callet, Marcus Barkowsky, Romuald Pépion, "Subjective quality of SVC-coded videos with different error-patterns concealed using spatial scalability", EUVIP, Paris, 2011.

Qualinet partner: YES

1.2.11 IRCCyN/IVC H264 AVC vs SVC VGA Video Database

Link: http://www.irccyn.ec-nantes.fr/spip.php?article783

Description:

This database contains 56 (28 QVGA and 28 VGA) videos sequences and the associated subjective results. 4 different video source contents were used in QVGA and the same 4 contents

in VGA. For each content, the reference (without degradation) and 6 different degradations, in each format called Hypothetical Reference Circuits (HRCs) were subjectively evaluated. The HRCs are based on H.264 and H.264/SVC coding without transmission errors. For each content, a SVC bitstream was created with 4 layers (2 in QVGA and 2 VGA)Some AVC bitstream were generated to compare each layer of the SVC coding with an AVC coding at the same bitrate and at the same PSNR.

Access:

Video sequences at FTP:
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_H264_AVC_vs_SVC/

Qualinet Databases Mirror: Link:
ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_H264_AVC_vs_SVC
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [PBP10].

References:

[PBP10] Yohann Pitrey, Marcus Barkowsky, Patrick Le Callet, Romuald Pépion, "SUBJECTIVE QUALITY ASSESSMENT OF MPEG-4 SCALABLE VIDEO CODING IN A MOBILE SCENARIO", Second European Workshop on Visual Information Processing, Paris, 2010.

Qualinet partner: YES

1.2.12 IRCCyN/IVC H264 HD vs Upscaling and Interlacing Video database

Link: http://www.irccyn.ec-nantes.fr/spip.php?article777

Description:

This database contains 87 videos sequences and the associated subjective results. 3 different video source contents were used. For each content, the reference (without degradation) and 28 different degradations called Hypothetical Reference Circuits (HRCs) were subjectively evaluated. The HRCs are based on H.264 coding without transmission errors. There are 6 different formats (1920x1080p50, 1920x1080i50, 1280x720p50, 1280x1080i50, 1280x1080p50 and SD (720x576)) and 3 different bitrates (3Mb/s, 6Mb/s and 9Mb/s). All Processed Video Sequences (PVS) are displayed on a 1920x1080 progressive display so the SD and 720 are upscaled and the interleaved format are deinterlaced.

Access:

Video sequences at FTP:
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_H264_HD_vs_Upscaling_Interlacing/

Qualinet Databases Mirror:
Link:
ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_H264_HD_vs_Upscaling_Interlacing
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [PLP10].

References:

[PLP10] Yohann Pitrey, Marcus Barkowsky, Patrick Le Callet, Romuald Pépion, "Subjective Quality Evaluation of H.264 High-Definition Video Coding versus Spatial Up-Scaling and Interlacing", Euro ITV, Tampere, 2010.

Qualinet partner: YES

1.2.13 IRCCyN/IVC Influence Content Video VGA database

Link: http://www.irccyn.ec-nantes.fr/spip.php?article771

Description:

This database contains 300 videos sequences and the associated subjective results. 60 different video source contents were used. For each content, the reference (without degradation) and 4 take randomly in 20 different degradations called Hypothetical Reference Circuits (HRCs) were subjectively evaluated. The HRCs are based on H.264/SVC coding without transmission errors. Several QP repartition are tested between the base layer of the SVC stream and the enhancement layer. The videos of the database are always the enhancement layer for 16 HRC. The four other HRCs are the base layer upscaled, with different QP parameters. A spreadsheet with the individual scores and the Mean Opinion Score (MOS) is provided for each of the 300 PVS. Absolute Category Rating (ACR) was used as test methodology. The H.264/SVC HRC are coded with the JSVM coder version 9.18. The SVC layers are coded at different QP values at 30Hz. Some videos have other degradations come from common set with other available tests.

Access:

Video sequences at FTP:
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_Influence_Content/Videos/
Spreadsheet with the individual scores and the Mean Opinion Score (MOS) for each of the 300 PVS:
ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_Influence_Content/IRCCyN_IVC_Influence_Content_Database_Score.xls
A text file describes the exact conditions in which the videos were evaluated:
ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_Influence_Content/General_Condition_IRCCyN_IVC_Influence_Content_Database.txt

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_Influence_Content
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [PBP12].

References:

[PBP12] Yohann Pitrey ; Marcus Barkowsky ; Romuald Pépion ; Patrick Le Callet ; Helmut Hlavacs ; "Influence of the source content and encoding configuration on the preceived quality for scalable video coding", SPIE Human Vision and Electronic Imaging XVII, Jan 2012, San franscisco.

Qualinet partner: YES

1.2.14 IRCCyN/IVC JEG264HMIX1 database

Link: http://www.irccyn.ec-nantes.fr/spip.php?article1033

Description:

This database contains 170 videos sequences, the subjective results including votes and Mean Opinion Scores and auxiliary data such as the transmitted video files and their parsed version, the Hybrid Model Input XML (HMIX) files. 10 different video source contents were used. For each content, the reference (without degradation) and 16 different degradations called Hypothetical Reference Circuits (HRCs) were subjectively evaluated. The HRCs are based on H.264 coding with and without transmission errors. Several encoders, decoders and packet loss schemes were used including transcoding scenarios, spatial and temporal subsampling. A description of the SRC and the HRC is provided in the description file including the description of the viewing environment in which the video quality was evaluated. We used Absolute Category Rating with Hidden Reference (ACR-HR) with 5 point scale as subjective experiment methodology. We provide a spreadsheet with the individual scores and the Mean Opinion Score (MOS) for each of the 170 Processed Video Sequences (PVS). The PVS (avi videos) are freely available on our FTP server. The source contents stem from several sources, including the Consumer Digital Video Library (CDVL), user generated content from the University of Vienna, and an excerpt of Sita Sings the Blues by Nina Paley. Some sequences were obtained using the left view of our NAMA3DS1 database. To see further information on the sources and their respective copyright information please refer to the SRC description in the description file. The dataset was created in the context of the Joint Effort Group / Hybrid project of the Video Quality Experts Group (VQEG/JEG-Hybrid). It may be used for training hybrid video quality measurement algorithms and to prepare indicators for large-scale verification on the upcoming VQEG/JEG-Hybrid database. Additional to the decoded video file, we provide the network bitstreams in PCAP format and the parsed version of the PCAP files as defined by VQEG/JEG : the Hybrid Model Input XML file (HMIX) files. Preview images are provided for getting an impression on the content seen by the observers during the subjective experiment.

Access:

Video sequences and other materials available at FTP:
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/JEG264HMIX1/

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_JEG264HMIX1
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [BSJ12].

References:

[BSJ12] Marcus Barkowsky, Nicolas Staelens, Lucjan Janowski, Yao Koudota, Mikołaj Leszczuk, Matthieu Urvoy, Patrik Hummelbrunner, Iñigo Sedano, Kjell Brunnström, "Subjective experiment dataset for joint development of hybrid video quality measurement algorithms", Third Workshop on Quality of Experience for Multimedia Content Sharing (QoEMCS), Berlin, July 2012.

Qualinet partner: YES

1.2.15 IRCCyN/IVC DIBR Videos

Link: http://www.irccyn.ec-nantes.fr/spip.php?article1156

Description:

The IRCCyN IVC DIBR Videos quality database contains 102 video sequences of 6 seconds in 1024x768 resolution with between 15 and 30 frames per second. Individual votes and MOS scores obtained by an ACR-HR experiment are provided. Three different multiview plus depth (MVD) sequences are considered in this database. The sequences are Book Arrival (1024x768, 16 cameras with 6.5cm spacing), Lovebird1 (1024x768, 12 cameras with 3.5 cm spacing) and Newspaper (1024x768, 9 cameras with 5 cm spacing). Seven DIBR algorithms processed the three sequences to generate, for each sequence, four new viewpoints.

Access:

Database at FTP, no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_DIBR_Videos/

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_DIBR_Videos
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your publications if you use this database in your work [BLM12].

References:

[BLM12] Emilie Bosc, Patrick Le Callet, Luce Morin, Muriel Pressigout, Visual quality assessment of synthesized views in the context of 3D-TV, 3D-TV System with Depth-Image-Based Rendering Architectures, Techniques and Challenges (2012) 439-474.

Qualinet partner: YES

1.2.16 EPFL-PoliMI Video Quality Assessment Database

Link: http://vqa.como.polimi.it/

Description:

EPFL-PoliMI video quality assessment database contains 156 video streams encoded with H.264/AVC and corrupted by simulating the packet loss due to transmission errors over the network. The material includes one set of 78 video sequences at CIF spatial resolution and another set of 78 sequences at 4CIF spatial resolution. We also include the results of the subjective tests carried out at the premises of 2 academic institutions, Politecnico di Milano - Italy and Ecole Polytechnique Fédérale de Lausanne - Switzerland. Fourty naive subjects took part in the subjective tests.

Access:

ZIP archive, no password
Link: http://vqa.como.polimi.it/QAdatabase/online_DB.zip

Citation:

If you use our data for your own publications please do not forget to reference this website and our papers [DNT09], [DNT10].

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References:

[DNT09] Francesca De Simone, Matteo Naccari, Marco Tagliasacchi, Frederic Dufaux, Stefano Tubaro, and Touradj Ebrahimi, "SUBJECTIVE ASSESSMENT OF H.264/AVC VIDEO SEQUENCES TRANSMITTED OVER A NOISY CHANNEL", (QoMEX 2009), July 29–31 2009, San Diego, California, U.S.A.
[DTN10] Francesca De Simone, Marco Tagliasacchi, Matteo Naccari, Stefano Tubaro, and Touradj Ebrahimi, "H.264/AVC VIDEO DATABASE FOR THE EVALUATION OF QUALITY METRICS", (ICASSP 2010), March 14–19 2010, Dallas, Texas, U.S.A.

Qualinet partner: YES

1.2.17 MMSPG 3D Video Quality Assessment Database

Link: http://mmspl.epfl.ch/page38842.html

Description:

The EPFL database (MMSPG 3D) contains 3D video quality test material (1920x1080) where the test conditions represent different camera distances [GDE10]. There were 20 subjects participants in the test and the camera distances were set to 10, 20, 30, 40 and 50 cm. The subjective test campaign was conducted using 46" polarized stereoscopic display with a native resolution of 1920x1080 pixels which is used to display the test stimuli.

Access:

Database in ZIP archives, password protected, password upon request Lutz Goldmann (lutz.goldmann@epfl.ch).
Links:
Processed and encoded stereo videos: LR video pairs stored as individual AVI files
https://ltslinux18.epfl.ch/~goldmann/3dvqa/EncodedVideos.zip
Raw subjective quality scores: List of 30 videos and the 30x20 score matrix as CSV files
http://ltslinux18.epfl.ch/~goldmann/3dvqa/RawScores.zip
Mean opinion scores and confidence intervals: 30x1 mean opinion score and confidence intervals as CSV files
http://ltslinux18.epfl.ch/~goldmann/3dvqa/MosCi.zip

Citation:

If you use this database in your research we kindly ask you to reference this website and the paper below [GDE10].

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Contacts:

Lutz Goldmann (lutz.goldmann@epfl.ch)

References:

[GDE10] Lutz Goldmann, Francesca De Simone, Touradj Ebrahimi: "A Comprehensive Database and Subjective Evaluation Methodology for Quality of Experience in Stereoscopic Video", Electronic Imaging (EI), 3D Image Processing (3DIP) and Applications, San Jose, USA, 2010.

Qualinet partner: YES

1.2.18 MMSPG Scalable Video Database

Link: http://mmspl.epfl.ch/page42039.html

Description:

The database focuses on 2 scalable video codecs: SVC and wavelet-based codec, 3 HD content videos, bit-rates ranging between 300 kbps and 4 Mbps, 3 spatial resolutions: 320x180, 640x360, and 1280x720, 4 temporal resolutions: 6.25 fps, 12.5 fps, 25 fps, 50 fps. In total, 28 and 44 video sequences were considered for each codec, respectively.

Access:

Database in ZIP archives, password protected, password upon request J.-S. Lee (jong-seok.lee@epfl.ch.)
Links:
Video data produced by SVC (bit streams and decoder executable under Linux)
https://documents.epfl.ch/groups/s/sv/svd/public/SVC_linux.zip
Video data produced by wavelet-based codec (bit streams and decoder executable under MS-Windows)
https://documents.epfl.ch/groups/s/sv/svd/public/WSVC.zip
Subjective rating data (excel file)
https://documents.epfl.ch/groups/s/sv/svd/public/rating_pair_comparison_final.zip

Citation:

The use of the data is conditional to the users explicitly and clearly mentioning and acknowledging the following publication [LDR10].

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Contacts:

Jong-Seok Lee (jong-seok.lee@epfl.ch)

References:

[RSW07] J. Reichel, H. Schwarz, and M. Wien, "Joint scalable video model (JSVM)," Joint Video Team, doc. JVT-X202, Jul. 2007.
[RZI09] N. Ramzan, T. Zgaljic, and E. Izquierdo, "An efficient optimization scheme for scalable surveillance centric video communications," Signal Processing: Image Communication, vol. 24, no. 6, pp. 510-523, 2009.
[LDR10] J.-S. Lee, F. de Simone, N. Ramzan, Z. Zhao, E. Kurutepe, T. Sikora, J. Ostermann, T. Ebrahimi, "Subjective evaluation of scalable video coding for content distribution," in Proc. ACM Multimedia, Firenze, Italy, pp. 65-72, Oct. 2010.

Qualinet partner: YES

1.2.19 MMSPG Mini-drone video dataset

Link: http://mmspg.epfl.ch/mini-drone

Description:

The created dataset consists of 38 different contents captured in full HD resolution, with a duration of 16 to 24 seconds each, shot with the mini-drone Phantom 2 Vision+ in a parking lot. The dataset contents can be clustered in three categories: normal, suspicious, and illicit behaviors. Normal content depicts people walking, getting in their cars and parking their vehicles. In suspicious content, nothing a priori wrong happens but people act in a questionable way. Contents with illicit behaviors show people mis-parking their vehicles, stealing items and cars, or fighting. All participants read and signed a consent form, stating they agree to appear with their vehicles in the video. Drone-based surveillance is particularly advantageous when it is not possible to set up a full-fledged surveillance system, for example, when a temporary major event such as a concert or a marathon is organized. Mini-drones can be used for monitoring the area, helping in managing parking spaces, controlling crowds and reporting useful information such as suspicious behaviors, mis-parked cars, number of free parking spots, etc.

Access:

You can download all video files and associated XML-based annotations from the following FTP (please use dedicated FTP clients, such as FileZilla or FireFTP):

FTP address: tremplin.epfl.ch
User name: minidrone@grebvm2.epfl.ch
Password: IH)cJ9c81*1H74kv

Citation:

You can use Mini-drone dataset in your research without any conditions, as long as you clearly mention and acknowledge the following paper [BKR15].

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Contacts:

Pavel Korshunov (pavel.korshunov@epfl.ch)

References:

[BKR15] M. Bonetto, P. Korshunov, G. Ramponi, and T. Ebrahimi. Privacy in Mini-drone Based Video Surveillance. Workshop on De-identification for privacy protection in multimedia, Ljubljana, Slovenia, 2015.

Qualinet partner: YES

1.2.20 IT-IST Lisbon H.264/MPEG-2 Video Quality Database

Link: http://amalia.img.lx.it.pt/~tgsb/H264_test/

Description:

Database with original sequences, as well as coded ones (using MPEG-2 and H.264/AVC), and corresponding MOS values, that can be shared with everyone participating in Qualinet.

Access:

Link: http://amalia.img.lx.it.pt/~tgsb/H264_test/

Contact:

Paula Queluz (mpq@lx.it.pt)

Qualinet partner: YES

1.2.21 3D Video Quality Assessment at Mid Sweden University (Proposal)

Link: http://www.miun.se/en/personnel/martensjostrom

Description:

It is the intention of the Mid Sweden University to produce contents for 3D-video evaluations during 2011. Formats to be considered: stereoscopic, multiview, 2D+depth and MVD.

Contacts:

Information for the database may be obtained by contacting Mårten Sjöström (marten.sjostrom@miun.se).

Qualinet partner: YES

1.2.22 LIVE Wireless Video Quality Assessment Database

Link: http://live.ece.utexas.edu/research/quality/live_wireless_video.html

Description:

There is the LIVE Wireless Video Quality Assessment Database (LIVE Wireless), which focuses on H.264/AVC compressed videos transmitted over wireless channel. This database consists of 10 reference videos and 160 distorted videos which were compressed and transmitted over a wireless channel. Each of the videos was viewed by over 30 subjects.

The LIVE Wireless Video Quality Assessment Database is no longer publicly available.

1.2.23 LIVE Video Quality Database

Link: http://live.ece.utexas.edu/research/quality/live_video.html

Description:

The LIVE Video Quality Database (LIVE VQD) includes MPEG-2 and H.264 compression and simulated transmission of H.264 compressed bitstreams through IP wired and wireless networks with errors. A set of 150 distorted videos were created from ten reference videos (15 distorted videos per reference) using four different distortion types and the database was assessed by 38 human subjects. Each video in the LIVE Video Quality Database was assessed by 38 human subjects in a single stimulus study with hidden reference removal, where the subjects scored the video quality on a continuous quality scale.

Access:

Download information for the database may be obtained by contacting Kalpana Seshadrinathan (kalpana.seshadrinathan@ieee.org).

Citation:

We are making the LIVE Video Quality Database available to the research community free of charge. If you use this database in your research, we kindly ask that you reference our papers listed below [SSB10], [SSB10b].

Copyright notice:

Link: http://live.ece.utexas.edu/research/quality/live_video.html
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Contacts:

Kalpana Seshadrinathan (kalpana.seshadrinathan@ieee.org)

References:

[SSB10] K. Seshadrinathan, R. Soundararajan, A. C. Bovik and L. K. Cormack, "Study of Subjective and Objective Quality Assessment of Video", IEEE Transactions on Image Processing, vol.19, no.6, pp.1427-1441, June 2010.
[SSB10b] K. Seshadrinathan, R. Soundararajan, A. C. Bovik and L. K. Cormack, "A Subjective Study to Evaluate Video Quality Assessment Algorithms", SPIE Proceedings Human Vision and Electronic Imaging, Jan. 2010.

Qualinet partner: NO

1.2.24 LIVE Mobile Video Quality Database

Link: http://live.ece.utexas.edu/research/quality/live_video.html

Description:

The new LIVE Mobile Video Quality Assessment (VQA) database consists of 200 distorted videos created from 10 RAW HD reference videos obtained using a RED ONE digital cinematographic camera. While the LIVE Mobile VQA database includes distortions that have been previously studied such as compression and wireless packet-loss, it also incorporates dynamically varying distortions that change as a function of time, such as frame-freezes and temporally varying compression rates. LIVE Mobile VQA database includes the subjective study, the human behavioral analysis, and the evaluation of current objective image and video quality assessment (IQA/VQA) algorithm with regards to their efficacy in predicting visual quality. LIVE has developed a Mobile VQA database that will supplement the LIVE Image/Video Quality Database, to provide researchers with a much-needed tool to advance the state-of-the-art in objective video quality assessment.

Access:

To download the database an online form has to be filled and the information will be sent to you.
Link:
https://docs.google.com/spreadsheet/viewform?formkey=dENtSVd4OHNQMk1YRnFNSzBTUFEtSFE6MQ

Citation:

We are making the LIVE Mobile Video Quality Database available to the research community free of charge. If you use this database in your research, we kindly ask that you reference our papers [MCB12, [MCV12], [MCD12].

Copyright notice:

Link: http://live.ece.utexas.edu/research/quality/live_mobile_video.html
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Contacts:

Dr. Anush Krishna Moorthy (anushmoorthy@gmail.com)
Lark Kwon Choi (larkkwonchoi@utexas.edu)
Dr. Alan C. Bovik (bovik@ece.utexas.edu)
Dr. Gustavo de Veciana (gustavo@ece.utexas.edu)

References:

[MCB12] A. K. Moorthy, L. K. Choi, A. C. Bovik and G. deVeciana, “Video Quality Assessment on Mobile Devices: Subjective, Behavioral and Objective Studies”, IEEE Journal of Selected Topics in Signal Processing, to appear in October 2012. (URL: http://live.ece.utexas.edu/research/quality/live_mobile_video.html)

[MCV12] K. Moorthy, L. K. Choi, G. deVeciana, and A. C. Bovik, “Mobile Video Quality Assessment Database,” IEEE ICC Workshop on Realizing Advanced Video Optimized Wireless Networks, Ottawa, Canada, June 10-15, 2012.
[MCD12] A. K. Moorthy, L. K. Choi, G. deVeciana, and A. C. Bovik, “Subjective Analysis of Video Quality on Mobile Devices,” Sixth International Workshop on Video Processing and Quality Metrics for Consumer Electronics (VPQM) (invited article), Scottsdale, Arizona, January 15-16, 2012.

Qualinet partner: NO

1.2.25 LaBRI H.264 with Network Impairment

Link: http://www.labri.fr/

Description:

This database is a result of joint effort of Laboratoire Bordelais de Recherche en Informatique LaBRI (University of Bordeaux) and Communication Systems Engineering Dept. (Ben Gurion University of the Negev (BGU)). The database is composed of 15 video sources (SRC) from OpenVideo.org, TUM/Taurus Media and NTIA/ITS databases. The SRC videos were encoded in H.264/AVC with the x264 encoder at 6000kb/s. The resolution of the 15 SRC videos is 1920x1080 pixels progressive and the frame-rate is 25 frames per second. The 15 SRC videos were decoded with the FFMPEG 0.5.1 H.264/AVC decoder to produce YUV 4:2:0 raw file, presented to the subjects during the experiment. According to recommendation ITU-R BT500.11, the length of each video sequence is equal to 10 seconds (250 frames). Two network models, IP and RF, were applied on the 15 SRC. The IP model is composed of 5 different loss profiles which are defined in ITU-T G.1050. The RF model is composed of 3 loss different profiles. Thus (5 + 3) * 15 = 120 PVS sequences are present in this database. Subjective and objective metrics were computed on this video database. The metrics values for each SRC and PVS sequences are stored in a table available in Microsoft Excel and CSV file formats. Subjective metrics are MOS (Mean Opinion Score) and DMOS (Differential Mean Opinion Score). Objective metrics are PSNR and SSIM. The settings of each HRC are also available in a table in CSV format. Tables with the offsets of the first frame in the H.264 streams (tables of sections 1 and 2.2) are stored in file LaBRI-exp-offsets.csv.

Access:

Download information for the database may be obtained by contacting Karel Fliegel (fliegek@fel.cvut.cz). The FTP access will be provided to the users registered in Qualinet Databases. The data volume is 102.6GB in total, including:
H.264/AVC video sequences, 135 sequences, 2.6GB
YUV video sequences, 135 sequences, 100GB
Experimental data, 3 files, 179kB

Citation:

In publications using the database, the following paper should be cited [BBH11].

Copyright notice:

To make it available to Qualinet an agreement has been signed with LaBRI. Other users will have to sign similar agreement to use the data.

Contacts:

Jenny Benois-Pineau (jenny.benois@labri.fr) - research related information
Karel Fliegel (fliegek@fel.cvut.cz) - download information

References:

[BBH11] Boujut, H.; Benois-Pineau, J.; Hadar, O.; Ahmed, T.; Bonnet, P. Weighted-MSE based on saliency map for assessing video quality of H.264 video streams, Image Quality and System Performance VIII. Edited by Farnand, Susan P.; Gaykema, Frans. Proceedings of the SPIE, Volume 7867, pp. 78670X-78670X-8 (2011).

Qualinet partner: YES

1.2.26 Video Quality Database for Video over UMTS

Link: http://www.tech.plym.ac.uk/spmc/people/lfsun/

Description:

The database created at the University of Plymouth consists of 90 test conditions for video over UMTS networks.

Contacts:

Information for the database may be obtained by contacting Lingfen Sun (L.Sun@plymouth.ac.uk).

References:

[KLI10] Khan, A.; Lingfen Sun; Ifeachor, E.; Fajardo, J.O.; Liberal, F.; , "Impact of RLC losses on quality prediction for H.264 video over UMTS networks," Multimedia and Expo (ICME), 2010 IEEE International Conference on , vol., no., pp.702-707, 19-23 July 2010
[KLI10b] Khan, A.; Lingfen Sun; Ifeachor, E.; Fajardo, J.O.; Liberal, F.; , "Video Quality Prediction Model for H.264 Video over UMTS Networks and Their Application in Mobile Video Streaming," Communications (ICC), 2010 IEEE International Conference on , vol., no., pp.1-5, 23-27 May 2010

Qualinet partner: YES

1.2.27 QoE in different 3D HDTV technologies

Link: http://deimos-project.cz/

Description:

The database contains a series of 3D HDTV subjective tests that we performed with help of over 120 observers. The aim was to compare several aspects of video image quality and QoE reported on different stereoscopic display systems for home entertainment, including active shutter glass display, polarized glass display and active shutter glass projection system. We used original video sequences created from different types of sources (blu-ray disc records, 3D camcorder, satellite reception and static images). The subjective tests were realized in the Laboratory of digital television at Department of Radio Electronics, Brno University of Technology. The user ratings were gathered through simple questionnaires addressing different aspects of viewing experience. The results of these ratings were evaluated and as a reference the test material will very soon be available in the DEIMOS database.

Access:

All materials are available upon request Martin Slanina (slaninam@feec.vutbr.cz) through DEIMOS database.
Link: http://deimos-project.cz/

Citation:

In publications using the database, the DEIMOS project description paper should be cited [KFP11].

Contacts:

Information for the database may be obtained by contacting
Martin Slanina (slaninam@feec.vutbr.cz)

References:

[KFP11] Klíma, M., Fliegel, K., Páta, P., Vítek, S., Blažek, M., Dostál, P., Krasula, L., Kratochvíl, T., Říčný, V., Slanina, M., Polák, L., Kaller, O., Boleček, L. DEIMOS – an Open Source Image Database, Radioengineering, 2011, vol. 20, no. 4, p. 1016-1023, ISSN 1210-2512.

Qualinet partner: YES

1.2.28 IVP Subjective Quality Video Database

Link: http://ivp.ee.cuhk.edu.hk/research/database/subjective/

Description:

Ten uncompressed, high definition (1920×1088) videos are used as source videos. One video which contains animations were rendered directly from 3D models, while other videos which contains natural scenes were shot with professional, high end equipment and converted to digital format with utmost care. The videos shot by us were recorded in a progressive RAW format at 25 fps without any compression. Distorted sequences are generated using 4 types of distortions: MPEG 2 compression, Dirac wavelet compression, H.264 compression and packet loss on the H.264 streaming through IP networks. MPEG 2 is a traditional standard in broadcasting society, H.264 is rapidly gaining popularity due to its superior compression efficiency, and Dirac wavelet is also competitive codec employed by BBC (British Broadcast Corporation). To ensure an enough span of video qualities, the distortion strengths were diversified. 42 paid observers participated in the subjective test, including 11 females and 31 males. Each observer assessed 10 source videos and 128 distorted videos. The single-stimulus quality scale test method (ACR) was used, where each video (including the reference) occurred once in a random order yet the two successive videos must come from different source videos so as to remove contextual and memory effects in quality evaluation.

Access:

Data is accessible via FTP (Username: videodb, Password: sequence2011)
Link: ftp://ivp.ee.cuhk.edu.hk/
Detailed description of the experiment is accessible via HTTP:
Link:
http://ivp.ee.cuhk.edu.hk/research/database/subjective/Detailed%20Information%20about%20the%20IVP%20Subjective%20Quality%20Video%20Database.pdf

Contacts:

Dr. Fan ZHANG (fzhang@ee.cuhk.edu.hk)
Mr. Songnan LI (snli@ee.cuhk.edu.hk)
Mr. Lin MA (lma@ee.cuhk.edu.hk)
Mr. Yuk Chung WONG (ycwong@ee.cuhk.edu.hk)
Dr. King Ngi NGAN (knngan@ee.cuhk.edu.hk)

Copyright notice:

Qualinet partner: NO

1.2.29 High Definition H.264/AVC Subjective Video Database for Evaluating the Influence of Slice Losses on Quality Perception

Link: http://avchd.intec.ugent.be/

Description:

This database consists of 456 Full HD H.264/AVC encoded and impaired video sequences. Each sequence has a resolution of 1920x1080 pixels, a frame rate of 25 fps and a duration of exactly 10 seconds. All sequences are progressive. Nine different encoder configurations were used and network impairments were injected by dropping single and multiple slices in the encoded video files. This database includes the encoded and impaired bitstreams and the corresponding decoded videos. Each video sequence has been subjectively evaluated by 24 subjects. Post-experiment screening of the test subjects, as detailed in Annex V of the VQEG HDTV report, was used to eliminate outliers from the response data. Different trace files are also included in this subjective video database which provide detailed information on the video content and location of the loss. These trace files can be used to locate the position of the loss in terms of missing pictures, slices, NAL units, and RTP packets.

Access:

For more information on how to obtain and use this subjective video database, please contact Nicolas Staelens (nicolas.staelens@intec.ugent.be).

Contacts:

Nicolas Staelens (nicolas.staelens@intec.ugent.be)

Citation:

In case the database is used in your own publication, cite one or more of the following papers [SVV13], [SVC12], [SDV13].

References:

[SVV13] N. Staelens, G. Van Wallendael, R. Van de Walle, F. De Turck, and P. Demeester, High Definition H.264/AVC Subjective Video Database for Evaluating the Influence of Slice Losses on Quality Perception, Proceedings of the Fifth International Workshop on Quality of Multimedia Experience (QoMEX), July 2013
[SVC12] N. Staelens, G. Van Wallendael, K. Crombecq, N. Vercammen, J. De Cock, B. Vermeulen, R. Van de Walle, T. Dhaene and P. Demeester, No-Reference Bitstream-based Visual Quality Impairment Detection for High Definition H.264/AVC Encoded Video Sequences, IEEE Transactions on Broadcasting, Vol. 58, Issue 2, pp. 187-199, June, 2012
[SDV13] N. Staelens, D. Deschrijver, E. Vladislavleva, B. Vermeulen, T. Dhaene and P. Demeester, Constructing a No-Reference H.264/AVC Bitstream-based Video Quality Metric using Genetic Programming-based Symbolic Regression, to appear in IEEE Transactions on Circuits and Systems for Video Technology.

Qualinet partner: YES

1.2.30 TU Delft i_QOE

Link: http://ii.tudelft.nl/iqlab/iQOE.html

Description:

Recently, a lot of effort has been devoted to estimating users' Quality of Experience (QoE) in order to optimize video delivery. So far, subjective (and objective, as a consequence) QoE assessment has been mostly associated to the perceptual quality of the video (i.e., asking users to self-report their perceptual satisfaction with respect to a set of multimedia contents), neglecting other QoE aspects, such as enjoyment or endurability. In addition, it is common practice in QoE research to target the average of user opinion scores gathered from subjective tests (also known as Mean Opinion Score, MOS). This approach does not take into account the dependency of QoE on individual characteristic, such as gender effects or personality, which are also known to influence user's QoE. As a result, there is a lack of publicly available QoE datasets (1) targeting other aspects of QoE besides perceptual quality and (2) providing individual subjective QoE ratings as well as corresponding individual user characteristics (e.g., gender, personality). We present here a dataset to address the above issues. The i_QoE dataset can be used for analyzing individual Quality of Experience in its many aspects, beyond perceptual quality only. The i_QoE dataset is based on an empirical study. For a full description of the experiment and its setup, please check the paper referenced above. Six different videos covering three genres (i.e., comedy, sports, education) were further encoded at two bitrate levels (i.e., 600kbps and 2000kbps) to enforce different perceived quality levels. Sixty participants were involved in this study. They were split into two disjoint groups: the 30 participants of one group watched all videos by themselves, whereas the 30 participants in the second group watched all videos with two friends (so, in groups of three; interaction among them was allowed). Before starting the experiment, participants were asked to fill in some questionnaires investigating personal information, such as the level of interest they had (a priori) in the video genres they were about to see, their immersive tendency, nationality, gender as well as their personality. After filling in the personal data questionnaire, participants watched one of the two versions (i.e., 600 or 2000 kbps) of each video, for all six videos. Bitrate levels as well as video order were counterbalanced across participants to guarantee that each participant would witness a similar range of perceived quality, and to avoid fatigue and learning effects. For each video, participants scored their QoE

in terms of enjoyment, endurability, satisfaction, involvement and perceived visual quality via a QoE questionnaire. All aspects (excluding Perceived Quality) were quantified by means of 4 questions each to be answered on a 7-point likert scale. Perceived video quality was instead measured through 2 questions (i.e., one for the annoyance of artifacts, and another one for the overall video quality) to be rated on a 5-point scale, according to the ITU-R BT.500 (2002) specification.

Access:

The database can be downloaded at the following link. The files are password protected. To get the password you can contact Yi Zhu (Y.Zhu-1@tudelft.nl)
Link:
http://ii.tudelft.nl/iqlab/databases/i_QoE.zip

Contacts:

Yi Zhu (Y.Zhu-1@tudelft.nl)

Citation:

We kindly request you to cite the following paper [YHR15] in any published work if you use this dataset.

References:

[YHR15] Zhu, Yi, Ingrid Heynderickx, and Judith A. Redi. "Understanding the role of social context and user factors in video Quality of Experience." Computers in Human Behavior 49 (2015): 412-426.

Qualinet partner: YES

1.2.31 CVD2014 Video Database

Link: http://www.helsinki.fi/~msjnuuti/CVD2014/

Description:

The CVD video database is developed to provide an useful tool for researchers in the validation and developing processes of no-reference (NR) objective video quality assessment (VQA) algorithms. It consists of 234 videos from five different scenes captured by 78 different cameras (mobile phones, compact camera, video camera, SLR). The subjective experiments are conducted following the Single-Stimulus (SS) procedure to collect ratings of video quality. Moreover, objective test chart data are measured and can be used to analyze performance of capturing devices.

Access:

Database is password protected. If you are interesting to download the database, please contact Mikko Nuutinen (mikko.nuutien@helsinki.fi).

Subjective rating of quality:
Link: http://www.helsinki.fi/~msjnuuti/CVD2014/CVD2014_ratings.7z
Video database:
Link: http://www.helsinki.fi/~msjnuuti/CVD2014/CVD-I.7z
Link: http://www.helsinki.fi/~msjnuuti/CVD2014/CVD-II.7z
Link: http://www.helsinki.fi/~msjnuuti/CVD2014/CVD-III.7z

Citation:

If you use this database in your research, we kindly ask that you follow the copyright notice and cite the following paper [NVV16].

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Contacts:

Mikko Nuutinen (mikko.nuutien@helsinki.fi)

References:

[NVV16] Nuutinen M, Virtanen T, Vaahteranoksa M, Vuori T, Oittinen P, Hakkinen J. CVD2014-A Database for Evaluating No-Reference Video Quality Assessment Algorithms, IEEE Trans Image Process. 2016 Jul;25(7):3073-86.

Qualinet partner: NO

1.3 Eyetracking Databases

1.3.1 Visual Attention for Image Quality Database (VAIQ)

Link: http://www.sea-mist.se/tek/rcg.nsf/pages/vaiq-db

Description:

The Visual Attention for Image Quality Database (VAIQ) is available from the Radio Communication Group at the Blekinge Institute of Technology. The database contains gaze patterns of 15 observers and saliency maps for 42 reference images from the IRCCyN/IVC, MICT, and LIVE databases as mentioned above.

Access:

ZIP archives, password protected, password upon request Ulrich Engelke (ulrichengelke@gmail.com).
Links:
Gaze patterns in Excel spreadsheets (~16.9 MB)
http://www.sea-mist.se/tek/rcg.nsf/attachments/vaiq_gaze_points_excel_1_zip/$file/vaiq_gaze_points_excel_1.zip
Gaze patterns in Matlab workspace (~3.6 MB)
http://www.sea-mist.se/tek/rcg.nsf/attachments/vaiq_gaze_points_matlab_1_zip/$file/vaiq_gaze_points_matlab_1.zip
Saliency maps Set 1 (~32.4 MB)
http://www.sea-mist.se/tek/rcg.nsf/attachments/vaiq_saliency_maps_1_zip/$file/vaiq_saliency_maps_1.zip
Saliency maps Set 2 (~34.2 MB)
http://www.sea-mist.se/tek/rcg.nsf/attachments/vaiq_saliency_maps_2_zip/$file/vaiq_saliency_maps_2.zip
Saliency maps Set 3 (~36.5 MB)

http://www.sea-mist.se/tek/rcg.nsf/attachments/vaiq_saliency_maps_3_1_zip/$file/vaiq_saliency_maps_3_1.zip
Saliency images (~13.6 MB)
http://www.sea-mist.se/tek/rcg.nsf/attachments/vaiq_saliency_images_1_zip/$file/vaiq_saliency_images_1.zip
VAIQ readme file (~4 kB)
http://www.sea-mist.se/tek/rcg.nsf/attachments/vaiq_readme_3_zip/$file/vaiq_readme_3.zip

Citation:

If you use the VAIQ database for your research, we kindly ask you to refer to our paper [EMZ09] and to this website [EMZ09b].

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References:

[EMZ09] U. Engelke, A. J. Maeder, and H.-J. Zepernick, "Visual Attention Modeling for Subjective Image Quality Databases," in Proc. of IEEE Int. Workshop on Multimedia Signal Processing (MMSP), October 2009.
[EMZ09b] U. Engelke, A. J. Maeder, and H.-J. Zepernick, "Visual Attention for Image Quality Database," http://www.bth.se/tek/rcg.nsf/pages/vaiq-db, 2009.

Qualinet partner: YES

1.3.2 IRCCyN/IVC Eyetracker 2006 05

Link: http://www.irccyn.ec-nantes.fr/spip.php?article553

Description:

This database contains eyetracker data and the associated images. There is no degradation on these images. It's a free task experiment. The dataset contains eyetracking data for 27 images.

Access:

Database at FTP, no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_Eyetracker_2006_05/

Qualinet Databases Mirror:
Link:
ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_Eyetracker_Images_LIVE_Database
Username: dbq-mirrors
Password: kucykepe

Citation:

Please cite the following paper in any published work if you use it [LLB06].

References:

[LLB06] O. Le Meur, P. Le Callet, D. Barba and D. Thoreau, A coherent computational approach to model the bottom-up visual attention, IEEE Pattern Analysis and Machine Intelligence, Vol. 28, N°5, May 2006.

Qualinet partner: YES

1.3.3 IRCCyN/IVC Eyetracker data for the Berkeley segmentation dataset

Link: http://www.irccyn.ec-nantes.fr/spip.php?article554

Description:

The dataset contains eyetracking data from 25 observers for 84 uncompressed images from the Berkeley Segmentation Dataset (http://www.eecs.berkeley.edu/Research/Projects/CS/vision/grouping/segbench/). There is no degradation on these images. A text file presents the general conditions of this test. It is a free task experiment.

Access:

Database at FTP, no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_Eyetracker_Berkeley_Database/

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_Eyetracker_Berkeley_Database
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [WCC10]. Please, cite also the paper from Berkeley for the database [MFM01].

References:

[WCC10] J. Wang, D. M. Chandler, P. Le Callet, "Quantifying the relationship between visual salience and visual importance", Spie Human and Electronic imaging (HVEI) XV, San Jose, 2010.
[MFM01] D. Martin, C. Fowlkes, D. Tal and J. Malik, "A Database of Human Segmented Natural Images and its Application to Evaluating Segmentation Algorithms and Measuring Ecological Statistics", Proc. 8th Int'l Conf. Computer Vision, Vol. 2, Pages 416-423, July 2001.

Qualinet partner: YES

1.3.4 IRCCyN/IVC Eyetracker SD 2008 11 Database

Link: http://www.irccyn.ec-nantes.fr/spip.php?article555

Description:

This database contains eyetracker data and the associated videos. The videos are several contents coded in H.264. The bit-rates are selected to have a good quality. A text file presents the general conditions of this test. It is a free task experiment. The bit-rates are selected to have a good quality. The goal is to collect saliency maps to test an area of interest protection software on these videos. Dataset contains eyetracking data from 37 observers for 51 H.264-compressed SD videos.

Access:

Database at FTP, no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_Eyetracker_2008_11/

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_Eyetracker_2008_11
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [BCP09].

References:

[BCP09] Fadi Boulos, Wei Chen, Benoit Parrein and Patrick Le Callet, "Region-of-Interest Intra Prediction for H.264/AVC Error Resilience", IEEE ICIP, 2009.

Qualinet partner: YES

1.3.5 IRCCyN/IVC Eyetracker SD 2009_12 Database

Link: http://www.irccyn.ec-nantes.fr/spip.php?article550

Description:

This database contains eyetracker data and the associated videos. The videos are with various content, the reference (without processing or degradation) and four error transmission simulations. The H.264 distorted videos are also provided. There is one spreadsheet with the individual score and the MOS for each video. A text file presents the general conditions of this test. It is a quality task experiment. The bit-rates are selected to have a good quality if we not aware on the transmission errors. The dataset contains subjective ratings as well as eyetracking data from 30 observers for 100 SD videos.

Access:

Database at FTP, no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_Eyetracker_SD_2009_12/

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_Eyetracker_SD_2009_12
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [EBL10].

References:

[EBL10] Ulrich Engelke, Marcus Barkowsky, Patrick Le Callet and Hans-Jürgen Zepernick, "Modelling Saliency Awareness for Objective Video Quality Assessment", International Workshop on Quality of Multimedia Experience (QoMEX), 2010.

Qualinet partner: YES

1.3.6 IRCCyN/IVC ETHyma

Link: http://www.irccyn.ec-nantes.fr/spip.php?article1192

Description:

The ETHyma eye-tracking images database contains 11 High Dynamic Range (HDR) images, the associated eye-tracking raw data and saliency maps. This database contains also 88 tone mapped images from HDR to Low Dynamic Range (standard images) and their associated eye-tracking raw data and saliency maps. The HDR images were displayed on an HDR display (Sim2 HDR47E S 4K) and the tone mapped images on a standard LCD.

Access:

Database at FTP, no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/ETHyma/

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_ETHyma
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [NPL12].

References:

[NPL12] Manish Narwaria, Matthieu Perreira Da Silva, Patrick Le Callet, Romuald Pépion, Effect of tone mapping operators on visual attention deployment, SPIE optics +photonics - Applications of Digital Image Processing XXXV, San Diego, 2012.

Qualinet partner: YES

1.3.7 IRCCyN/IVC Eyetracker Image LIVE

Link: http://www.irccyn.ec-nantes.fr/spip.php?article841

Description:

This image database contains 29 images from the LIVE database and the corresponding fixation density maps (three versions, see the related publications for details), added to the raw eye-tracking data.

Access:

Database at FTP, no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_Eyetracker_Images_LIVE_Database/

Qualinet Databases Mirror:
Link:
ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_Eyetracker_Images_LIVE_Database
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your publications if you use this database in your work [ELW13].

References:

[ELW13] Engelke, U. ; Liu, H. ; Wang, J. ; LE CALLET, P. ; Heynderickx, I. ; Zepernick, H.-J. ; Maeder, A. ; A Comparative Study of Fixation Density Maps, Image Processing, IEEE Transactions on , vol.22, no.3, pp.1121-1133, March 2013.

Qualinet partner: YES

1.3.8 IRCCyN/IVC 3DGaze

Link: http://www.irccyn.ec-nantes.fr/spip.php?article1102

Description:

The 3DGaze image database contains 18 stereoscopic images and the associated fixation density map, disparity map, depth map, and the raw eye tracking data. Among the 18 images provided, 10 images come from the Middlebury database, and the other 8 images are acquired in the campus of University of Nantes.

Access:

Database at FTP, no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/EyMIR3D/

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_EyMIR3D
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [WPL13].

References:

[WPL13] Wang, J. ; Perreira Da Silva, M. ; LE CALLET, P. ; Ricordel, V. ; A computational model of stereoscopic 3D visual saliency, Image Processing, IEEE Transactions on , vol.PP, no.99, pp.1, 0 doi : 10.1109/TIP.2013.2246176.

Qualinet partner: YES

1.3.9 IRCCyN/IVC HD UHD Eyetracking Videos

Link: http://ivc.univ-nantes.fr/en/databases/HD_UHD_Eyetracking_Videos/

Description:

The main goal of this dataset is the comparison of visual attention and viewing behavior in HD and UHD.Different kind of analyses can be done: comparison of saliency through fixation density maps, impact of viewing conditions and resolution on distribution of gaze points and fixations, comparison of distribution of saccades, etc. Moreover, this dataset can be used to evaluate the performance of visual saliency models in HD and UHD, by comparing fixation density maps computed from acquired data with simulated saliency maps. Futhermore, this dataset provides useful data for any researcher working on dynamic visual attention in videos (dynamic visual attention modelling, visual attention and quality of experience, saliency-based

video compression, etc.). The main qualities of the dataset are the large number of sources and observers compared to previously published video saliency database, as well as the high quality of professional videos.

Access:

Database at FTP, no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCYN_IVC_HD_UHD_Eyetracking_Videos/

Contacts:

ivcdb@univ-nantes.fr

Qualinet partner: YES

1.3.10 IRCCyN/IVC Eye-tracking saliency maps and importance maps for blurred images

Link: http://ivc.univ-nantes.fr/en/databases/Intentionally_Blurred_Background_Images/

Description:

This image database contains 72 images. There are 6 versions of each still image content. The original added to 5 power of blur. The 12 original images come from the Berkeley Segmentation Dataset as specified in our paper. The database was created to evaluate a no-reference metric that quantifies perceived image quality induced by blur.

Access:

Database at FTP, no password.
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/Intentionally_Blurred_Background_Images/

Citation:

Please, cite the following paper in your reference if you use this database for your work [LWR11].

References:

[LWR11] H. Liu, J. Wang, J. Redi, P. Le Callet, H. Ingrid. An efficient no-reference metric for perceived blur, 2011 3rd European Workshop on Visual Information Processing (EUVIP), Jun 2011, Paris, France.

Contacts:

ivcdb@univ-nantes.fr

Qualinet partner: YES

1.3.11 MMSPG HDR-Eye: dataset of high dynamic range images with eye tracking data

Link: http://mmspg.epfl.ch/hdr-eye

Description:

To understand the influence on the human visual attention when a conventional LDR image is replaced with an HDR image, we created a new HDR public dataset that contains 46 HDR images together with their LDR versions and covers large variety of content. We conducted an eye tracking experiment involving 20 naive subjects to collect eye tracking data for these images using a professional eye tracking system Smart Eye Pro 5.8 and a commercially available HDR SIM2 monitor.

Access:

Link:
http://mmspg.epfl.ch/hdr-eye

Citation:

If you use the HDR-Eye dataset in your research, we kindly ask you to reference our paper [NKH15] and the URL (http://mmspg.epfl.ch/hdr-eye)

Contacts:

Philippe Hanhart (philippe.hanhart@epfl.ch)

References:

[NKH15] H. Nemoto, P. Korshunov, P. Hanhart and T. Ebrahimi. Visual attention in LDR and HDR images. 9th International Workshop on Video Processing and Quality Metrics for Consumer Electronics (VPQM), Chandler, Arizona, USA, 2015.

Qualinet partner: YES

1.3.12 TU Delft Eye-Tracking Release 1

Link: http://mmi.tudelft.nl/iqlab/eye_tracking_1.html

Description:

Eye-tracking data were collected in order to better understand how people look to images under natural viewing conditions. Twenty-nine source images of the LIVE image quality assessment database were used as stimuli, and twenty participants were requested to look at the images in a natural way. A map indicating the natural scene saliency (NSS) was derived from the eye-tracking data. Dataset contains saliency maps for 29 reference images obtained using 20 observers.

Access:

ZIP archive, password protected, password upon request Hantao Liu (Hantao.Liu@tudelft.nl)
Link: http://mmi.tudelft.nl/iqlab/databases/TUD_LIVE_EyeTracking.zip

Citation:

The eye-tracking data are publicly available to the research community. Please cite the following references if you use this database in your research [LH09], [LH09b].

References:

[LH09] H. Liu and I. Heynderickx, "Studying the Added Value of Visual Attention in Objective Image Quality Metrics Based on Eye Movement Data", in Proc. IEEE International Conference on Image Processing, pp. 3097-3100, November 2009.
[LH09b] H. Liu and I. Heynderickx, "TUD Image Quality Database: Eye-Tracking Release 1", http://mmi.tudelft.nl/iqlab/eye_tracking_1.html.

Qualinet partner: YES

1.3.13 TU Delft Eye-Tracking Release 2

Link: http://mmi.tudelft.nl/iqlab/eye_tracking_2.html

Description:

Eye-tracking data were collected in order to better understand how people look to images when assessing image quality. In the experiment, people were showed images and were given two different tasks. One was to simply look at the images as if they were looking at a photo album.

The other was to assess the quality level of the images. With the eye tracker it was possible to track the eye movement of the viewers and map the salient regions for images given different tasks and with different levels of image quality. Dataset contains eyetracking data from 75 observers for 160 JPEG-compressed images.

Access:

ZIP archive, password protected, password upon request Hani Alers (Hani.Alers@Gmail.com)
Link: http://mmi.tudelft.nl/iqlab/databases/TUD_Task_EyeTracking.zip

Citation:

The eye-tracking data are publicly available to the research community. Please cite the following references if you use this database in your research [ALR10], [ALR10b].

References:

[ALR10] H. Alers, H. Liu, J. Redi and I. Heynderickx, "Studying the risks of optimizing the image quality in saliency regions at the expense of background content ", IS&T/SPIE Electronic Imaging 2010, Image Quality and System Performance VII, Jan 2010.
[ALR10b] H. Alers, H. Liu, J. Redi and I. Heynderickx, "TUD Image Quality Database: Eye-Tracking Release 2", http://mmi.tudelft.nl/iqlab/eye_tracking_2.html.

Qualinet partner: YES

1.3.14 TU Delft Interactions

Link: http://mmi.tudelft.nl/iqlab/interactions.html

Description:

The interactions database was designed to invesigate on the deviations of quality scoring saliency from free looking saliency. In particular, the effect of two factor is of interest: the quality level of the images evaluated, and the distortion affecting them. Eye movements were recorded by means of a SensoMotoric Instruments GmbH Eye Tracker while 14 subjects were scoring the quality of 54 distorted stimuli with the Single Stimulus method with continuous numerical scaling. The stimuli used in the experiment consisted of several distorted versions of 6 original images selected from the LIVE database. These were selected such that we had a fair representation of different content, including images with and without a clear region of interest, images with and without humans in the picture, and images with various amounts of textured components. To evaluate the effect of distortion type and quality level, various distorted version of these original images were chosen from the LIVE database. Three kinds of distortions were considered, namely JPEG compression, White noise and Gaussian Blur. For each original image and distortion type, three different quality levels were selected: a highly distorted one, one with a medium distortion level, and one for which the applied distortion just slightly compromised the quality. The interaction database includes, together with the original stimuli, the corresponding fixation and saliency maps and the MOS obtained from the scoring task. The experimental procedure is described in more detail in the paper "Interactions of visual attention and quality perception".

Access:

ZIP archive, password protected, password upon request Judith Redi (J.A.Redi@tudelft.nl)
Link: http://mmi.tudelft.nl/iqlab/databases/TUD_Interactions.zip

Citation:

The eye-tracking data are publicly available to the research community. Please cite the following references if you use this database in your research. [RH11], [RLZ11].

References:

[RH11] J. Redi and I. Heynderickx, "TUD Image Quality Database: Interactions", http://mmi.tudelft.nl/iqlab/interactions.html.
[RLZ11] J. Redi, H. Liu, R. Zunino, I. Heynderickx, "Interactions of visual attention and quality perception", IS&T/SPIE Electronic Imaging 2011 and Human Vision and Electronic Imaging XVI. 7865, 2011.

Qualinet partner: YES

1.3.15 TU Delft Video Task Effect Eye-Tracking

Link: http://mmi.tudelft.nl/iqlab/video_task_eye_tracking_1

Description:

Eye-tracking data were collected in order to better understand how people watch videos when assessing their quality level. In the experiment, two groups of viewers were shown video segments and were given two different tasks. One was to simply look at the video as if they were watching TV or an internet downloaded video. The other was to assess the quality level of the videos. With the eye tracker, it was possible to track the eye movement of the viewers and map the salient regions for images given the different tasks and with different levels of video quality. More details on the experimental set-up and results can be found in the references.

Access:

ZIP archive, password protected, to get the password you can contact Hani Alers (Hani.Alers@Gmail.com).
Videos + MOS quality scores:
Link: http://mmi.tudelft.nl/iqlab/databases/TUD_Video_Task_EyeTracking.zip
Maps: Maps Group1 (scoring) [2.2 GB]:
Link: http://mmi.tudelft.nl/iqlab/databases/Maps%20Group1%20(scoring).zip
Maps: Maps Group2 (scoring) [1.8 GB]
Link: http://mmi.tudelft.nl/iqlab/databases/Maps%20Group2%20(scoring).zip
Maps: Maps Group3 (Free-looking) [2.0 GB]
Link: http://mmi.tudelft.nl/iqlab/databases/Maps%20Group3%20(Free-looking).zip
Maps: Maps Group4 (Free-looking) [4.1 GB]
Link: http://mmi.tudelft.nl/iqlab/databases/Maps%20Group4%20(Free-looking).zip

Citation:

The eye-tracking data are publicly available to the research community. Please cite the following references if you use this database in your research. [ALH12], [ALR12].

References:

[ALH12] H. Alers, H. Liu, J. Redi and I. Heynderickx, "TUD Video Quality Database: Eye-Tracking Release 2", http://mmi.tudelft.nl/iqlab/video_task_eye_tracking_1
[ALR12] H. Alers, H. Liu, J. Redi and I. Heynderickx, "Examining the effect of task on viewing behavior in videos using saliency maps", IS&T/SPIE Electronic Imaging 2012, Human Vision and Electronic Imaging XVII, Jan 2012.

Qualinet partner: YES

1.3.16 TU Delft A&A dataset - Aesthetics and visual Attention

Link: http://ii.tudelft.nl/iqlab/A&A.html

Description:

Predicting the aesthetic appeal of (consumer) images is of great interest for a number of applications, from image retrieval to visual quality optimization. A key element in determining the beauty of an image is the ability of the photographer to guide the attention of the viewer to the subject of interest. To this purpose, both image simplicity (i.e., clarity of the subject) and compositional rules (e.g., the well-known rule of thirds), are used to drive the observer's visual focus and ease perceptual fluency. Quite interestingly, although these are well-accepted rules-of-thumb for good photography, there has been very little effort in validating them in a scientific way, especially towards investigating the interactions between image aesthetic appeal appreciation and visual attention deployment. The A&A dataset aims at providing a basis for performing such more rigorous validation. The dataset consists of 200 images, their subjective ratings on Aesthetic Appeal, Color likeability, Recognizability and Familiarity, and their respective fixation and saliency maps.

Access:

The dataset can be downloaded at the link indicated above. It comes as password protected zip file. To get the password, please send an email to j.a.redi@tudelft.nl

Citation:

Please cite the following references if you use this database in your research. [RP13].

Contacts:

Judith Redi (j.a.redi@tudelft.nl)

References:

[RP13] Redi J, Povoa I, The role of visual attention in the aesthetic appeal of consumer images: a preliminary study. in proc. International Conference on Video Communication and Image Processing (VCIP 2013), 2013.

Qualinet partner: YES

1.3.17 UCSB Saliency Dataset

Link: https://labs.psych.ucsb.edu/eckstein/miguel/research_pages/saliencydata.html

Description:

We investigated the effect of task differences on the ability of three models of saliency to predict the performance of humans viewing a novel database of 800 natural images. We introduced a novel task where 100 observers made explicit perceptual judgments about the most salient image region. Other groups of observers performed a free viewing task, saliency search task, or cued object search task.

Access:

The dataset is available for download after submitting the form at:
https://labs.psych.ucsb.edu/eckstein/miguel/research_pages/saliencydata.html

Citation:

If you use this work, please cite [KGZ14].

Contacts:

Katie Koehler (koehler@psych.ucsb.edu)

References:

[KGZ14] Koehler, K., Guo, F., Zhang, S., & Eckstein, M. P. (2014). What do saliency models predict? Journal of Vision, 14(3):14, 1– 27, http://www.journalofvision.org/content/14/3/14, doi:10.1167/14.3.14.

Qualinet partner: YES

1.3.18 USC Eye-tracking data for complex video stimuli

Link: http://crcns.org/data-sets/eye/eye-1

Description:

This freely shared dataset consists of a body of 520 human eye-tracking data traces obtained while normal, young adult human volunteers freely watched complex video stimuli (TV programs, outdoors videos, video games). The dataset comprises eye movement recordings from eight distinct subjects watching 50 different video clips (~25 minutes of total playtime; Itti, 2004; 2005; this is the "Original" experiment), and from another eight subjects watching the same set of video clips after scrambling them into randomly re-ordered sets of 1-3s clippets (Carmi & Itti, 2006a; 2006b; this is the "MTV" experiment). A very nice and much fuller description of the data is crcns-eye1-summary.pdf (270.3 kB).

Access:

Four ZIP archives (each between 1.2GB and 1.8GB), password protected, password obtained after registration (http://crcns.org/join_form)
Link: http://crcns.org/data-sets/eye/download

Citation:

Data on this site is made available only for scientific purposes. Redistribution of the data is not permitted. Any publications derived from the data should cite the data contributor and CRCNS.org as being the source of the data.

References:

[CI06a] R. Carmi, L. Itti, The Role of Memory in Guiding Attention during Natural Vision, Journal of Vision, Vol. 6, No. 9, pp. 898-914, Aug 2006.
[CI06b] R. Carmi, L. Itti, Visual Causes versus Correlates of Attentional Selection in Dynamic Scenes, Vision Research, Vol. 46, No. 26, pp. 4333-4345, Dec 2006.

Qualinet partner: NO

1.3.19 RUG Eye-Tracking Data

Link: http://www.ai.rug.nl/~gert/index.php?item=215&menu=200

Description:

Human fixation data during an eye tracking experiment using the Eyelink head-mounted eye tracking system (SR research). Fixation locations were extracted using the accompanied software. The images were displayed full-screen with a resolution of 1024 by 768 pixels on an 18 inch crt monitor of 36 by 27 cm at a distance of 70 cm from the participants. The eye tracker was calibrated using the Eyelink software. The calibration was verified prior to each session, and recalibrated if needed. The participants were asked to free view the images. The experiment was carried out by 31 students of the University of Groningen.

Access:

Eye-track images, human fixation-distance maps and eye-track data in archives.

Links:
Eye-track images in tgz archive (134.9MB)
http://www.ai.rug.nl/~gert/index.php?item=602&menu=&file=eyeTrackExp2/eyeTrackImages.tgz
Human fixation-distance maps (1GB)
http://www.ai.rug.nl/~gert/index.php?item=602&menu=&file=eyeTrackExp2/eyeTrackFDMaps.tgz
Eye-track data (1006.2KB)
http://www.ai.rug.nl/~gert/index.php?item=602&menu=&file=eyeTrackExp2/eyeTrackData.mat

Citation:

The eye-tracking data is freely available for non-commercial scientific purposes. If you publish work based on this data, please refer to the paper where the data is first described [KNB08].

References:

[KNB08] Kootstra, G., Nederveen, A. & de Boer, B. (2008) Paying Attention to Symmetry. In: Proceedings of the British Machine Vision Conference (BMVC2008) pp. 1115-1125, September 1-4, 2008, Leeds, UK.

Qualinet partner: NO

1.3.20 LIVE DOVES: A database of visual eye movements

Link: http://live.ece.utexas.edu/research/doves/

Description:

DOVES (a Database Of Visual Eye movementS) is a collection of eye movements from 29 human observers as they viewed 101 natural calibrated images. Recorded using a high-precision dual-Purkinje eye tracker, the database consists of around 30,000 fixation points, and is believed to be the first large-scale database of eye movements to be made available to the vision research community.

Access:

ZIP archive with Images, Fixations, RawData, Code, password upon request Ian van der Linde (ianvdl@bcs.org)
Link: http://live.ece.utexas.edu/research/doves/Doves.zip

Citation:

The database, along with MATLAB functions for its use, may be download freely here, and may be used without restriction for educational and research purposes, providing that our paper/this website are cited in any published work [LRB09].

Copyright notice:

Link: http://live.ece.utexas.edu/research/doves/#Copyright
Permission is hereby granted, without written agreement and without license or royalty fees, to use, copy, modify, and distribute this database (the eye movement data only) and its documentation for any purpose, provided that the copyright notice in its entirety appear in all copies of this database, and the original source of this database, Laboratory for Image and Video Engineering (LIVE, http://live.ece.utexas.edu) and Center for Perceptual Systems (CPS, http://www.cps.utexas.edu) at the University of Texas at Austin (UT Austin, http://www.utexas.edu), is acknowledged in any publication that reports research using this database. The database is to be cited in the bibliography as [LRB09].

Contacts:

Ian van der Linde (ianvdl@bcs.org)

References:

[LRB09] van der Linde, I., Rajashekar, U., Bovik, A.C., Cormack, L.K. (2009). DOVES: A database of visual eye movements. Spatial Vision, 22(2): 161-177.

Qualinet partner: NO

1.3.21 USC iLab Video Dataset

Link: http://ilab.usc.edu/vagba/dataset/

Description:

The collected 50 uncompressed YUV format video clips were presented to 14 subjects and their eye fixation points were recorded over frames from each clip by an eye-tracker machine. The recorded eye traces represent the subjects' shifting overt attention, thus the eye-tracking data are qualified to validate the performance of the attention prediction model and the visual subjective quality.

Access:

50 HD video clips, raw eye-tracking experiment data and video clips with visualized eye-tracking fixations are available at the following link.
Link: http://ilab.usc.edu/vagba/dataset/

Citation:

We have put a lot of effort into making these databases available to you. By downloading any of the databases below, you agree to properly cite the associated master reference, which typically is the paper where we first described the database and used it with our model, and to provide a link to the present web page.

Contacts:

Laurent Itti (itti@pollux.usc.edu)

References:

[LQI11] van Li, Z., Qin, S., Itti, L. Visual attention guided bit allocation in video compression, Image and Vision Computing 29 (1), 2011, pp. 1-14.

Qualinet partner: NO

1.3.22 MIT CSAIL Dataset

Link: http://people.csail.mit.edu/tjudd/WherePeopleLook/index.html

Description:

For many applications in graphics, design, and human computer interaction, it is essential to understand where humans look in a scene. Where eye tracking devices are not a viable option, models of saliency can be used to predict fixation locations. Most saliency approaches are based on bottom-up computation that does not consider top-down image semantics and often does not match actual eye movements. The database contains collected eye tracking data of 15 viewers on 1003 images and use this database as training and testing examples to learn a model of saliency based on low, middle and high-level image features. This large database of eye tracking data is publicly available with this paper.

Access:

ZIP archives with eye tracking database:
Set of stimuli:
Link: http://people.csail.mit.edu/tjudd/WherePeopleLook/ALLSTIMULI.zip
Eye tracking data:
http://people.csail.mit.edu/tjudd/WherePeopleLook/DATA.zip
Human fixation maps:
http://people.csail.mit.edu/tjudd/WherePeopleLook/ALLFIXATIONMAPS.zip

Contacts:

Judd Tilke (tjudd@mit.edu)

References:

[TED09] Tilke, J., Ehinger, K., Durand, F., Torralba, A. Learning to predict where humans look, 2009, Proceedings of the IEEE International Conference on Computer Vision , art. no. 5459462, pp. 2106-2113.

Qualinet partner: NO

1.3.23 NUS Eye Fixation database

Link: http://mmas.comp.nus.edu.sg/NUSEF.html

Description:

The NUSEF (NUS Eye Fixation) database was acquired from undergraduate and graduate volunteers aged 18-35 years (μ=24.9, σ=3.4). The ASLT M eye-tracker was used to non-invasively record eye fixations, as subjects free-viewed image stimuli. We chose a diverse set of 1024 × 728 resolution images, representative of various semantic concepts and capturing objects at varying scale, illumination and orientation, based on quality and aspect ratio constraints. Images comprised everyday scenes from Flickr, aesthetic content from Photo.net, Google images and emotion-evoking IAPS pictures.

Access:

Single archive containing Images, Eye-fixation data, Ground truth segmentation, Visualisation code (60.9 MB).
Link: http://mmas.comp.nus.edu.sg/NUSEF_database.zip

Citation:

If you use this database, please cite NUSEF as [KSK10].

Copyright notice:

Link: http://mmas.comp.nus.edu.sg/NUSEF.html
NUSEF is available for research purposes only and we adhere to Fair Use terms and conditions **(**http://en.wikipedia.org/wiki/Copyright#Fair_use_and_fair_dealing**)**. IAPS images have their own copyright terms and images can be obtained from the NIMH CSEA by filling in their request form **(**http://csea.phhp.ufl.edu/media/iapsmessage.html**)**.

Contacts:

Mohan Kankanhalli (mohan@comp.nus.edu.sg)

References:

[KSK10] H. Katti, N. Sebe1, M. Kankanhalli, T-S. Chua2, An Eye Fixation Database for Saliency Detection in Images, R. Subramanian, European Conference on Computer Vision (ECCV 2010), Heraklion, Greece, September 2010.

Qualinet partner: NO

1.3.24 INB Video Eyetracking Dataset

Link: http://www.inb.uni-luebeck.de/tools-demos/gaze

Description:

Large data set of eye movement data on high-resolution natural movies, Hollywood trailers, and static images. Eye movement data from 54 subjects for 18 outdoor scenes (HD), 2 Hollywood trailers (SD), and static images taken from the outdoor scenes.

Access:

Zip archives containing Stimuli and Gaze data.
Natural movies, original format:
Link: http://www.inb.uni-luebeck.de/tools-demos/gaze/movies-m2t.zip
Natural movies, MPEG-1:
Link: http://www.inb.uni-luebeck.de/tools-demos/gaze/movies-mpg.zip
"stop-motion" movies:
Link: http://www.inb.uni-luebeck.de/tools-demos/gaze/stopmotion-movies.zip
Static images in JPG format:
Link: http://www.inb.uni-luebeck.de/tools-demos/gaze/static-images.zip
Gaze data:
http://www.inb.uni-luebeck.de/tools-demos/gaze/gaze.zip

Citation:

Please cite the paper [DMG10] if you use our data set in your own publications. We would also appreciate to hear about your research - please send an e-mail to dorr@inb.uni-luebeck.de.

Contacts:

Michael Dorr (dorr@inb.uni-luebeck.de)

References:

[DMG10] Michael Dorr, Thomas Martinetz, Karl Gegenfurtner, and Erhardt Barth. Variability of eye movements when viewing dynamic natural scenes. Journal of Vision, 10(10):1-17, 2010.

Qualinet partner: NO

1.3.25 Dynamic Images and Eye Movements (DIEM)

Link: http://thediemproject.wordpress.com/

Description:

The DIEM project is an investigation of how people look and see. DIEM has so far collected data from over 250 participants watching 85 different videos. All of our data is freely available for research and non-commercial use as restricted by a CC-NC-SA 3.0 Creative Commons license. The data together with CARPE will let you visualize where people look during dynamic scene viewing such as during film trailers, music videos, or advertisements. The project was made possible by generous funding from the Leverhulme Trust and the Economic and Social Research Council of the UK. Datasets come with CARPE, or Computational and Algorithmic Representation and Processing of Eye-movements, allows one to begin visualizing eye-movement data in a number of ways.

Access:

CARPE, or Computational and Algorithmic Representation and Processing of Eye-movements:

Link: http://code.google.com/p/dynamic-images-and-eye-movements/
The DIEM Database is available in archives at:
Link: http://bit.ly/diemdata

Contacts:

Parag K. Mital (pkmital@gmail.com)

Qualinet partner: NO

1.3.26 Fixations In Faces (FiFa) DataBase

Link: http://www.fifadb.com/

Description:

This FiFa database is dedicated to sharing data pertaining to observers viewing of faces in natural scenes. The data provided includes subjects' viewing of images containing faces, showing that faces are attracting the attention. Fixations are provided in Matlab format. Additionally, a Matlab code used for determining the saliency of locations in given images is provided. This code is used to predict the locations of subjects fixations in images.

Access:

Below is a link to the fixations of 8 subjects viewing images of natural scenes.
Link: http://www.klab.caltech.edu/~moran/fifadb/fixations.mat
In addition to the fixations data, we provide an annotation of the entire dataset. That is, the location and labeling of faces in images are given. This allows for easier further analysis of the data.
Link: http://www.klab.caltech.edu/~moran/fifadb/annotations.mat
All the images used in the study can be viewed.
Link: http://www.klab.caltech.edu/~moran/db/faces/faces-tif.tgz
For a list of all images used in the study (corresponding to the fixations struct) download the list of images below.
Link: http://www.klab.caltech.edu/~moran/fifadb/imgList.mat

Citation:

Please acknowledge usage of this data by citing this paper [CFK09]. Additionally, please refer to the paper for details on the fixations and the method by which they were acquired. Please acknowledge usage of these images by citing this paper [CHE07]. Additionally, please refer to the paper for details on the images and the method by which they were acquired and used in prior studies.

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Link: http://mmas.comp.nus.edu.sg/NUSEF.html
NUSEF is available for research purposes only and we adhere to Fair Use terms and conditions **(**http://en.wikipedia.org/wiki/Copyright#Fair_use_and_fair_dealing**)**. IAPS images have their own copyright terms and images can be obtained from the NIMH CSEA by filling in their request form **(**http://csea.phhp.ufl.edu/media/iapsmessage.html**)**.

Contacts:

Moran Cerf (moran@klab.caltech.edu)
Paxon Frady (efrady@ucsd.edu)
Michael MacKay (mhsm3@cam.ac.uk)
Jonathan Harel (harel@klab.caltech.edu)
Wolfgang Einhäuser (wet@physik.uni-marburg.de)

References:

[CFK09] Moran Cerf, Paxon Frady, Christof Koch, Faces and text attract gaze independent of the task: Experimental data and computer model, Journal of Vision, 9(12):10, 1-15, 2009.
[CHE07] Moran Cerf, Jonathan Harel, Wolfgang Einhaeuser, Christof Koch, Predicting human gaze using low-level saliency combined with face detection, Advances in Neural Information Processing Systems (NIPS), 2007.

Qualinet partner: NO

1.3.27 INRIA AIM Dataset

Link: http://www-sop.inria.fr/members/Neil.Bruce/#SOURCECODE

Description:

Eye movement data of up to 11 observers for 120 color images. This includes binary maps for each of the images which indicate which pixel locations were fixated in addition to the raw data.

Access:

Below is a direct link to the data.
Link: http://www-sop.inria.fr/members/Neil.Bruce/eyetrackingdata.zip

Contacts:

Neil Bruce (Neil.Bruce@sophia.inria.fr)

Qualinet partner: NO

1.3.28 KTH Koostra Dataset

Link: http://www.csc.kth.se/~kootstra/index.php?item=215&menu=200

Description:

Human fixation data is recorded during an eye tracking experiment using the Eyelink head-mounted eye tracking system (SR research). Fixation locations were extracted using the accompanied software. The images were displayed full-screen with a resolution of 1024 by 768 pixels on an 18 inch crt monitor of 36 by 27 cm at a distance of 70Â cm from the participants. The eye tracker was calibrated using the Eyelink software. The calibration was verified prior to each session, and recalibrated if needed. The participants were asked to free view the images. We did not give the participants a task, since we are interested in the bottom-up components of visual attention. A task would give a strong top-down influence on the eye movements. The experiment was carried out by 31 students of the University of Groningen. The participants ranged from 17 to 32 years old, among them 15 females and 16 males with normal or corrected-to-normal vision. The experiment was split up into sessions of approximately 5 minutes. Between the sessions, the experimenter had a short relaxing conversation with the participants, in order to get them motivated and focused for the next session. Before starting a new session, the calibration of the eye tracker was verified. After each presented images, drift was measured and corrected if needed using the Eyelink software.

Access:

Eye-track images (134.9MB):
Link:
http://www.csc.kth.se/~kootstra/index.php?item=602&menu=&file=eyeTrackExp2/eyeTrackImages.tgz
Human fixation-distance maps (1GB):

Link:
http://www.csc.kth.se/~kootstra/index.php?item=602&menu=&file=eyeTrackExp2/eyeTrackFDMaps.tgz
Eye-track data (1MB):
Link:
http://www.csc.kth.se/~kootstra/index.php?item=602&menu=&file=eyeTrackExp2/eyeTrackData.mat

Citation:

The eye-tracking data is freely available for non-commercial scientific purposes. If you publish work based on this data, please refer to the following paper [KBS11].

Copyright notice:

Link: http://mmas.comp.nus.edu.sg/NUSEF.html
NUSEF is available for research purposes only and we adhere to Fair Use terms and conditions **(**http://en.wikipedia.org/wiki/Copyright#Fair_use_and_fair_dealing**)**. IAPS images have their own copyright terms and images can be obtained from the NIMH CSEA by filling in their request form **(**http://csea.phhp.ufl.edu/media/iapsmessage.html**)**.

Contacts:

Gert Kootstra (kootstra@kth.se)

References:

[KBS11] Kootstra, G., de Boer, B., and Schomaker L.R.B. (2011) Predicting Eye Fixations on Complex Visual Stimuli using Local Symmetry. Cognitive Computation, 3(1):223-240. doi: 10.1007/s12559-010-9089-5.

Qualinet partner: NO

1.3.29 ImgSal McGill Database for Saliency Detection

Link: http://www.cim.mcgill.ca/~lijian/database.htm

Description:

Existing saliency benchmarks (e.g. Bruce's dataset, Hou'dataset, Harel's dataset and so on) are collections of images, with no attempt to categorize the difficulty of analysis required. Hence, ImgSal presents new saliency benchmark for saliency models validation. The database provide both REGION ground truth (human labeled) and FIXATION ground truth (by eye tracker). ImgSal features: (1) Collection of 235 color images, which are divided into six different categorie, (2) Provide both human fixation records (saccades data) and human labeled results, (3) Easy to use. ROC and PoDSC evaluation codes.

Access:

Various data files can be downloaded from the website.
Link: http://www.cim.mcgill.ca/~lijian/database.htm

Contacts:

Jian Li (lijian@cim.mcgill.ca)

Qualinet partner: NO

1.3.30 MIT Modeling search for people

Link: http://cvcl.mit.edu/searchmodels/

Description:

How predictable are human eye movements as they search real world scenes? Here, we recorded 14 observers' eye movements as they performed a search task (person detection) on 912 outdoor scenes. Searchers demonstrated high consistency of fixation locations, even when the target was absent from the scene. Furthermore, observers tended to fixate consistent regions even when those regions were not visually salient. We modeled three sources of guidance: saliency, target features, and scene context. Each of these sources independently outperformed a smart chance level at predicting human fixations. Models that combine sources of guidance predicted 94% of human agreement, with the scene context module providing the most explanatory power. Critically, none of the models could reach the precision and fidelity of a human-based attentional map. This work establishes a benchmark for computational models of search in real world scenes. Further improvements in modeling should capture mechanisms underlying the selectivity of observer's fixations during search.

Access:

Data set: Image stimuli:
Link: http://cvcl.mit.edu/searchmodels/Dataset_STIMULI.zip
Data set: Eye data:
Link: http://cvcl.mit.edu/searchmodels/Dataset_EyeData.zip
Data set: Context oracle maps:
Link: http://cvcl.mit.edu/searchmodels/Dataset_ContextOracle.zip
Pre-generated maps: Target features Maps:
Link: http://cvcl.mit.edu/searchmodels/targetFeatureMaps.zip
Pre-generated maps: Saliency Maps:
http://cvcl.mit.edu/searchmodels/saliencyMaps.zip

Contacts:

Aude Oliva (oliva@mit.edu)

References:

[EHT09] Krista A. Ehinger, Barbara Hidalgo-Sotelo, Antonio Torralba, Aude Oliva, Modelling search for people in 900 scenes: A combined source model of eye guidance, Modelling search for people in 900 scenes: A combined source model of eye guidance, VISUAL COGNITION, 2009, 17 (6/7), 945-978.

Qualinet partner: NO

1.3.31 SBU Gaze-Detection-Description Dataset

Link: http://www.cs.stonybrook.edu/~kyun/research/gaze/index.html

Description:

Eye fixations of 3 participants for 1000 images from the Pascal VOC dataset and of 8 participants for 104 images from the SUN09 dataset. Also includes descriptions, pre-trained object detectors, and associated bounding boxes. We posit that user behavior during natural viewing of images contains an abundance of information about the content of images as well as information related to user intent and user defined content importance. In this paper, we conduct experiments to better understand the relationship between images, the eye movements people make while viewing images, and how people construct natural language to describe images. We explore these relationships in the context of two commonly used computer vision datasets. We then further relate human cues with outputs of current visual recognition systems and demonstrate prototype applications for gaze-enabled detection and annotation.

Access:

Data and code available in one archive (183.2MB):
Link:
http://www.cs.stonybrook.edu/~kyun/research/gaze/dataset/SBUGazeDetectionDescriptionDataset_v0.2.tgz

Contacts:

Dimitris Samaras (samaras@cs.sunysb.edu)

References:

[YPS13a] Kiwon Yun, Yifan Peng, Dimitris Samaras, Gregory J. Zelinsky, and Tamara L. Berg, Studying Relationships Between Human Gaze, Description, and Computer Vision, Computer Vision and Pattern Recognition (CVPR) 2013 (Oregon/USA)
[YPS13b] Kiwon Yun, Yifan Peng, Dimitris Samaras, Gregory J. Zelinsky and Tamara L. Berg, Exploring the Role of Gaze Behavior and Object Detection in Scene Understanding, Frontiers in Psychology, December 2013, 4(917): 1-14
[YPA13] Kiwon Yun, Yifan Peng, Hossein Adeli, Tamara L. Berg, Dimitris Samaras, and Gregory J. Zelinsky, Specifying the Relationships Between Objects, Gaze, and Descriptions for Scene Understanding, Visual Science Society (VSS) 2013 (Florida/USA)

Qualinet partner: NO

1.3.32 Visual stimulus, Intent, Person (VIP) Dataset

Link: http://mmas.comp.nus.edu.sg/VIP.html

Description:

Eye tracking data from 75 participants for 150 images from the NUSEF dataset, with one group performing anomaly detection, the other free viewing. Includes demographic and personality data for trait-specific models. The images were selected from the NUSEF dataset, which contains both neutral and affective images. Out of 758 NUSEF images, 150 were randomly selected. 75 subjects were recruited from a mixture of undergraduate, postgraduate and working adult population. The male and female subjects are recruited separately to ensure an even distribution. They were tasked to view the 150 images in a free-viewing (i.e. without assigned task) or anomaly detection setting. Each image was displayed for 5 seconds, followed by 2 seconds viewing of a gray screen. The images were displayed in random order. Their eye-gaze data was recorded with a binocular infra-red based remote eye-tracking device SMI RED 250. The recording was done at 120Hz. The subjects were seated at 50 centimeters distance from a 22 inch LCD monitor with 1680x1050 resolution. This setup is similar to other ones used in eye-gaze research. Before start of the viewing experiment, the subjects also provided their demographic data: gender, age-group, ethnicity, religion, field of study/work, highest education qualification, income group, expenditure group and nationality. 3 personality type questions are posed based on the Jung's Psychological types. The recorded eye-gaze data were preprocessed with the SMI SDK to extract the fixations from the preferred eye as chosen by the subjects.

Access:

Data and code available in one archive (183.2MB):
Link: http://mmas.comp.nus.edu.sg/VIP_files/VIP_Dataset.zip

Citation:

If you are using this dataset, please cite [MSK13].

Contacts:

Keng-Teck Ma (ktma@comp.nus.edu.sg)

Copyright notice:

VIP dataset is available for research purposes only. By downloading or using the dataset, you are deemed to agree to terms and conditions.
Link: http://mmas.comp.nus.edu.sg/VIP_files/terms.html

References:

[MSK13] Keng-Teck Ma. Terence Sim and Mohan Kankanhalli, A Unifying Framework for Computational Eye-Gaze Research. 4th International Workshop on Human Behavior Understanding. Barcelona, Spain. 2013.

Qualinet partner: NO

1.3.33 Eye tracking database for standard video sequences

Link: http://www.sfu.ca/~ibajic/datasets.html

Description:

Eye tracking data of 15 observers for 12 video sequences. This dataset includes a database of gaze locations by 15 independent viewers on a set of 12 standard CIF video sequences: Foreman, Bus, City, Crew, Flower Garden, Mother and Daughter, Soccer, Stefan, Mobile Calendar, Harbor, and Tempete. Included are the gaze locations for the first and second viewing of each sequence, their visualizations, heat maps, and sample MATLAB demo files that show how to use the data.

Access:

Data and available in one archive (478MB):
Link: http://www.sfu.ca/~ibajic/datasets/SFU_etdb.rar

Contacts:

Ivan V. Bajić (ibajic@ensc.sfu.ca)

References:

[HEB12] H. Hadizadeh, M. J. Enriquez, and I. V. Bajić, Eye-tracking database for a set of standard video sequences, IEEE Trans. Image Processing, vol. 21, no. 2, pp. 898-903, Feb. 2012.

Qualinet partner: NO

1.3.34 Actions in the Eye

Link: http://vision.imar.ro/eyetracking/description.php

Description:

Eye movement data from 16 participants for 1857 videos, with one group performing action recognition, the other free viewing. Two datasets were used Hollywood-2 and UCF Sports. Eye movements were recorded using an SMI iView X HiSpeed 1250 tower-mounted eye tracker, with a sampling frequency of 500Hz.

Access:

The dataset can be obtained after registering at:
Link: http://vision.imar.ro/eyetracking/description.php

Citation:

The license agreement for data usage implies the citation of the two papers [MS12a], [MS12b]. Please notice that citing the dataset URL instead of the publications would not be compliant with this license agreement.

Copyright notice:

Grant of license free of charge for academic use only. Details about the license can be found at:
Link: http://vision.imar.ro/eyetracking/license.php

References:

[MS12a] Stefan Mathe and Cristian Sminchisescu, Dynamic Eye Movement Datasets and Learnt Saliency Models for Visual Action Recognition, European Conference on Computer Vision (ECCV), 2012.
[MS12b] Stefan Mathe and Cristian Sminchisescu, Actions in the Eye: Dynamic Gaze Datasets and Learnt Saliency Models for Visual Recognition, Technical Report, Institute of Mathematics at the Romanian Academy and University of Bonn (Februray 2012).

Qualinet partner: NO

1.3.35 Memorability database

Link: http://www.tcts.fpms.ac.be/attention/

Description:

135 images of 3 classes of image memorability (low, average high) were extracted from Isola database. The images come along with eye-tracking data. Recently, the memorability of an image database was measured and some factors responsible for this memorability were highlighted. The role of visual attention in image memorability around two axis is investigated. The first one is experimental and uses results of eye-tracking performed on a set of images of different memorability scores. The second investigation axis is predictive and we show that attention-related features can advantageously replace low-level features in image memorability prediction.

Access:

The dataset can be downloaded from the webpage:
Link: http://www.tcts.fpms.ac.be/attention/
Direct link to the ZIP file:
Link: http://www.tcts.fpms.ac.be/attention/data/documents/data/memorability.zip

Citation:

If you use the database, please cite this reference [ML13].

References:

[ML13] M. Mancas, O. Le Meur, Memorability of Natural Scenes: the Role of Attention, Proceedings of the International Conference on Image Processing (IEEE ICIP 2013), Melbourne, Australia, September 15-18.

Qualinet partner: NO

1.3.36 ASCMN database

Link: http://www.tcts.fpms.ac.be/attention/

Description:

24 videos (5 classes: Abnormal, Surveillance, Crowd, Moving, Noise) / 10 observers per video. No specific task was asked to the viewers. The eye-tracker raw data sampled at the frame rate of each video are provided.

Access:

The dataset can be downloaded from the webpage:
Link: http://www.tcts.fpms.ac.be/attention/
Direct link to the ZIP file:
Link: http://www.tcts.fpms.ac.be/attention/data/documents/data/ACCV2012_database.zip

Citation:

If you use the database, please cite this reference [RMC12].

References:

[RMC12] N. Riche, M. Mancas, D. Ćulibrk, V. Ćrnojevic, B. Gosselin, T. Dutoit, Dynamic saliency models and human attention: a comparative study on videos, Proceedings of the 11th Asian Conference on Computer Vision (ACCV), Daejeon, Korea, November 5-9.

Qualinet partner: NO

1.3.37 Mouse tracking database

Link: http://www.tcts.fpms.ac.be/attention/

Description:

91 images (3 classes: natural images, advertisements, websites) / 40 - 60 observers per image. The task was to show with the mouse the regions of the image which are attended. In this case mouse and eye tracking have high correlation.

Access:

The dataset can be downloaded from the webpage:
Link: http://www.tcts.fpms.ac.be/attention/
Direct link to the ZIP file:
Link: http://www.tcts.fpms.ac.be/attention/data/documents/data/mouse_tracking_database.zip

Citation:

If you use the database, please cite this reference [Man09].

References:

[Man09] M. Mancas, Relative Influence of Bottom-Up and Top-Down Attention, Attention in Cognitive Systems, Lecture Notes in Computer Science, Springer Berlin / Heidelberg, ISSN 0302-9743 (Print) 1611-3349 (Online), Volume 5395/2009, DOI 10.1007/978-3-642-00582-4, ISBN 978-3-642-00581-7, February 2009.

Qualinet partner: NO

1.3.38 EyeC3D: 3D video eye tracking dataset

Link: http://mmspg.epfl.ch/eyec3d

Description:

Understanding visual attention in 3DTV is essential for many applications, e.g., capture, coding, visual confort enhancement, 2D-to-3D conversion, retargeting, and subtitling. Therefore, public datasets of 3D content with associated ground truth eye tracking data are needed. To overcome

the lack of publicly available 3D video eye tracking datasets, we created the EyeC3D dataset. Eight stereoscopic video sequences were used in the eye tracking experiments. For each video, eye movement data was recorded via a set of subjective experiments. From the eye movement data, the fixation density maps (FDMs) were computed for each frame of the stereoscopic video sequences. Eight stereoscopic video sequences were used in the eye tracking experiments. Five sequences (Boxers, Hall, Lab, News report, and Phone call) were obtained from the NAMA3DS1 database. Two sequences (Musicians and Poker) were obtained from the European FP7 Research Project MUSCADE. Sequence Poznan Hall2 was obtained from the Poznan multiview video database.

Access:

You can download all lists of fixation points and fixation density maps from the following FTP (please use dedicated FTP clients, such as FileZilla or FireFTP):
Coming soon!

Contacts:

In case of any problems or questions, please send an email to Philippe Hanhart (philippe.hanhart@epfl.ch).

Citation:

If you use the EyeC3D dataset in your research, we kindly ask you to reference the following paper [HE14] and URL link of this website (http://mmspg.epfl.ch/eyec3d).

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References:

[HE14] P. Hanhart and T. Ebrahimi. EyeC3D: 3D video eye tracking dataset. Sixth International Workshop on Quality of Multimedia Experience (QoMEX), Singapore, September 2014.

Qualinet partner: YES

1.3.39 Ultra-Eye: UHD and HD images eye tracking dataset

Link: http://mmspg.epfl.ch/ultra-eye

Description:

Understanding human attention patterns and viewing strategies for UHD content is important for developing efficient data compression algorithms and accurate objective quality metrics. To help studying these properties and their dynamics when HD content is replaced with UHD content, we provide a publicly accessible dataset, called Ultra-Eye, which is composed of 41 4K UHD and HD images in TIFF format with corresponding eye tracking information. The eye tracking information includes the fixation points and fixation density maps measured during extensive subjective experiments. The dataset can be used for research purposes.

Access:

You can download all image files, lists of fixation points and fixation density maps from the following FTP (please use dedicated FTP clients, such as FileZilla or FireFTP):
FTP address: tremplin.epfl.ch
User name: UltraEye@grebvm2.epfl.ch
Password: 96U#JXe7fX(990dZ
The total size of the dataset is about 1.3 GB.

Contacts:

In case of any problems or questions, please send an email to Hiromi Nemoto (hiromi.nemoto@epfl.ch).

Citation:

If you use the Ultra-Eye dataset in your research, we kindly ask you to reference the following paper [NHK14] and URL link of this website (http://mmspg.epfl.ch/ultra-eye).

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References:

[NHK14] H. Nemoto, P. Hanhart, P. Korshunov, and T. Ebrahimi. Ultra-Eye: UHD and HD images eye tracking dataset. Sixth International Workshop on Quality of Multimedia Experience (QoMEX), Singapore, September 2014.

Qualinet partner: YES

1.4 Audiovisual Databases

As it can be seen from the sections above, many annotated databases exist for images and videos. However there are not many subjective audio or audiovisual quality databases available.

1.4.1 Audiovisual Database for Video Calls over Wireless Networks

Link: http://www.tech.plym.ac.uk/spmc/staff/mgoudarzi/subjective/

Description:

The database created at the University of Plymouth is for audiovisual quality assessment which consists of 60 test conditions for video call over wireless networks. Subjective tests were performed according to ITU-T recommendations for audiovisual, video and audio, respectively. Absolute Category Rating (ACR) was used in experiments using a discrete 9-level quality scale for low-bitrate evaluations.

Contacts:

Information for the database may be obtained by contacting Lingfen Sun (L.Sun@plymouth.ac.uk).

Access:

You can download the database from the following link (including ref/deg video clips, datasheet for MOS and relevant parameters, and a readme file):
Link: http://www.tech.plym.ac.uk/spmc/staff/mgoudarzi/Provider/av_database/UoP_av_db.zip

References:

[GLI10] Goudarzi, M.; Lingfen Sun; Ifeachor, E., Audiovisual Quality Estimation for Video Calls in Wireless Applications, GLOBECOM 2010, 2010 IEEE Global Telecommunications Conference , vol., no., pp.1-5, 6-10 Dec. 2010.

Qualinet partner: YES

1.4.2 Audiovisual Quality Database for Mobile Multimedia Applications (Proposal)

Link: http://www.tech.plym.ac.uk/spmc/people/lfsun/

Description:

In this project, we aim to develop a subjective audiovisual quality database for mobile multimedia applications. The database will consist of reference and degraded audio, video and audiovisual samples/clips (including both short and long clips). The degraded samples/clips will be created/collected from both NS2/OPNET simulation platforms and mobile VoIP/IPTV testbed based on open IMS core and Android phone at the University of Plymouth. If resources are available, some data collection among different partners over the Internet and local mobile network is also possible. For each experiment (to obtain the degraded sample/clip), the network trace data (for fixed/mobile/wireless network) will also be collected for post-processing and further deriving network parameters (e.g. packet loss, loss burstiness, bit error rate and jitter). The application level parameters (e.g. codec used, frame rate, send bit rate and resolution) will also be recorded and stored in the database. Carefully selected reference and/or degraded data set will be used for subjective tests according to ITU-T P.800, P.910 and P.911 to obtain audio-only, video-only and overall audiovisual quality scores. The subjective tests can be based on a normal PC or over a mobile handset for further investigating how devices/resolutions affect audio/video/audiovisual quality.

Contacts:

Information for the database may be obtained by contacting Lingfen Sun (L.Sun@plymouth.ac.uk).

Qualinet partner: YES

1.4.3 MMSPG EPFL Balelec dataset for PetaMedia community

Link: http://mmspg.epfl.ch/page-58393-en.html

Description:

The provided 22 sequences were recorded during the Balelec Festival which was held in EPFL, Lausanne, Switzerland on May 9th, 2009. They contain interviews with people during the festival and the atmosphere of the festival. Most of the interviews are in English, but sometimes French and German were also spoken. The length of the sequences varies between 13 and 160 seconds. The EPFL Balelec dataset is made available to the PetaMedia community in order to

provide the community with a benchmark dataset for any relevant research fields. Due to the storage problem, the original high definition recordings have been re-encoded by reducing the frame size and the quality. Finally, the visual component of the provided data has the frame size of 704x396 pixels and the frame rate of 50 Hz (interlaced), which was encoded in MPEG-4. The audio component in the MP3 format has a stereo channel with a 48 kHz sampling rate.

Access:

All the data are available in one single zip file of approximately 170 MB (restrictive access only).
https://documents.epfl.ch/groups/p/pe/petamedia/private/Balelec09%20data/balelec.zip

Citation:

If you download the data, it is assumed that you agree to the copyright notice written above. If you use the data for your own publications, please do not forget to reference this website and to acknowledge PetaMedia and EPFL.

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Contacts:

If you encounter any problem in downloading the data or you have questions or comments, please write to:
Jong Seok Lee (jong-seok.lee@epfl.ch)

Qualinet partner: YES

1.4.4 TUM 1080p50 Data Set

Link: http://www.ldv.ei.tum.de/en/research/videolab/data-sets-downloads/tum-1080p50-data-set/

Description:

The TUM 1080p50 Data Set consists of the subjective test results and bitstreams of five different HDTV 1080p50 video sequences of the SVT test set (CrowdRun, TreeTilt, PrincessRun, DanceKiss and FlagShoot), encoded with H.264/AVC resulting in rate points between 2-40 MBit/s, resulting in 20 different data points. The subjective test were run in four scenarios: - (1) Reference monitor (Sony BVM-L230, 23"), (2) Consumer LCD display (Sony KDL-55X4500, 56"), (2) LCoS Projector (JVC DLA-HD750, 2.8m), LCoS Projector & 7.1 surround sound (JVC DLA-HD750, 2.8m).

Access:

All video sequences and other materials are available via FTP.
Link: ftp://ftp.ldv.ei.tum.de/videolab/public/TUM_1080p50_Data_Set/

Citation:

The use of the TUM 1080p25 Data Set in any publication shall be attributed as [KRD12].

Copyright notice:

The TUM 1080p50 Data Set is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Germany License (http://creativecommons.org/licenses/by-nc-sa/3.0/de/deed.en). The use of the TUM 1080p50 Data Set in any publication shall be attributed as [KRD12].

Contacts:

Christian Keimel (christian.keimel@tum.de)

References:

[KRD12] C. Keimel, A.Redl and K. Diepold, "The TUM High Definition Video Data Sets," in Fourth International Workshop on Quality of Multimedia Experience (QoMEX 2012), 2012.

Qualinet partner: YES

1.4.5 Audiovisual Subjective Dataset for Research and Development

Link: http://www.cdvl.org/

Description:

In 2011, the Video Quality Experts Group (VQEG) ran subjects through the same audiovisual subjective test at six different international laboratories. That small dataset is now publically available for research and development purposes. Ten sets of audiovisual MOS values are available for vqegMM2. Six laboratories conducted the experiment in a controlled environment. Four labs repeated the experiment in a public environment. These opinion scores are available on CDVL (www.cdvl.org).

Access:

The test dataset can be found on the Consumer Digital Video Library (CDVL, www.cdvl.org) by searching for the keyword (vqegMM2).

Contacts:

Margaret Pinson (margaret@its.bldrdoc.gov)

Citation:

Please, cite the following paper in your reference if you use this database for your work [PSJ13].

References:

[PSJ13] M. Pinson, C. Schmidmer, L. Janowski, R. Pépion, Q. Huynh-Thu, P. Corriveau, A. Younkin, P. Le Callet, M. Barkowsky, W. Ingram: Subjective and Objective Evaluation of an Audiovisual Subjective Dataset for Research and Development.

Qualinet partner: YES

1.4.6 Made for Mobile Database

Link: http://www.ani.univie.ac.at/~cacmtv/made-for-mobile/

Description:

The Made for Mobile Database is a collection of video sequences made by the University of Vienna. It is specifically targeted at the evaluation of video quality and content production rules with regards to the contrast between mobile and classical television. The Made for Mobile Database consists of a total of 22 professionally produced clips: 12 mobile episodes (3 episodes, 2 variants, in 2 languages), 4 news show clips (1 episode, 2 variants in 2 languages), 4 sports

clips (2 episodes, 2 languages). All clips are available with English and German audio tracks. The database only consists of SRC videos.

Access:

To get in contact and receive download instructions, please write an informal mail to Werner Robitza (werner.robitza@univie.ac.at). We would ask you to leave your personal data (name, e-mail address) and affiliation with us.

Citation:

Please cite the two works [BWL12], [RPN12] listed under References.

Copyright notice:

Copyright: Entertainment Computing Research Group, University of Vienna
The contents of the Made for Mobile Database are available free of charge, but only on personal request. Permission is hereby granted, without written agreement and without license or royalty fees, to use, copy, modify, and distribute this database (the video and audio material, the results and all the source files) and its documentation for any purpose, provided that the copyright notice in its entirety appear in all copies of this database, and the original source of this database, Entertainment Computing Research Group, University of Vienna is acknowledged in any publication that reports research using this database.

Contacts:

Information for the database may be obtained by contacting
Werner Robitza (werner.robitza@univie.ac.at)
Yohann Pitrey (yohann.pitrey@univie.ac.at)
Shelley Buchinger (shelley.buchinger@univie.ac.at)
Helmut Hlavacs (helmut.hlavacs@univie.ac.at)

References:

[BWL12] S. Buchinger, J. Wippersberg, K. Lojka, K. Macher, W. Robitza, M. Nezveda, P. Hummelbrunner and H. Hlavacs: Mobile TV Content Design Rules, in: TV Content Analysis. CRC Press, Taylor Francis LLC, 2012
[RPN12] W. Robitza, Y. Pitrey, M. Nezveda, S. Buchinger and H. Hlavacs: Made for Mobile: A Video Database Designed for Mobile Television. In VPQM - Sixth International Workshop on Video Processing and Quality Metrics for Consumer Electronics, 2012

Qualinet partner: YES

1.4.7 VTT Audiovisual Dataset

Link: https://gitlab.willab.fi/qualinet/audiovisualdataset

Description:

Subjective ratings from 24 participants from Audiovisual assessment campaign. Degraded videos by request (intact original videos are from The Consumer Digital Video Library). In the campaign Audiovisual vote, audio vote and video vote about quality was asked about 125 streamed video samples that were degraded by introducing packet losses. The database can be used to train and validate parametric models with independent variables resolution, amount of movement, packet loss and burstiness.

Access:

Go to https://gitlab.willab.fi/qualinet/audiovisualdataset.
Then select Download zip or visit the files from Files tab.

Citation:

Please, cite the following paper, if you use this database: [MKD13]

Contacts:

Toni Maki (toni.maki@vtt.fi)
Martín Varela (martin.varela@vtt.fi)

References:

[BWL12] S. Buchinger, J. Wippersberg, K. Lojka, K. Macher, W. Robitza, M. Nezveda, P. Hummelbrunner and H. Hlavacs: Mobile TV Content Design Rules, in: TV Content Analysis. CRC Press, Taylor Francis LLC, 2012
[MKD13] T. Maki, D. Kukolj, D. Dordevic, and M. Varela, "A reduced-reference parametric model for audiovisual quality of IPTV services," in 2013 Fifth International Workshop on Quality of Multimedia Experience (QoMEX), 2013, pp. 6–11.

Qualinet partner: YES

2 Other Databases

Besides the above listed annotated still and video image quality databases there are other valuable resources of visual material for the purpose of image and video quality assessment.

2.1 Image Databases

2.1.1 Uncompressed Colour Image Database (UCID)

Link: http://www-staff.lboro.ac.uk/~cogs/datasets/UCID/ucid.html

Description:

The aim of the UCID is to provide a benchmark dataset for image retrieval. The database has over 1300 images together with a ground truth (predefined query images with corresponding model images that should be retrieved). It is envisaged that the dataset is used for the evaluation of image retrieval techniques.

Access:

TAR-GZIP archive (~650MB), no password
Link: http://vision.cs.aston.ac.uk/datasets/UCID/data/ucid.v2.tar.gz

Citation:

If you are using this dataset we will be grateful if you could let us know by dropping us an e-mail. Also please cite the following publication in any papers that mention the database [SS04].

References:

[SS04] G. Schaefer and M. Stich (2004) "UCID - An Uncompressed Colour Image Database", Proc. SPIE, Storage and Retrieval Methods and Applications for Multimedia 2004, pp. 472-480, San Jose, USA.

Qualinet partner: NO

2.1.2 MPEG data set/base for Compact Descriptors for Visual Search (CDVS)

Links: www.vision.ee.ethz.ch/showroom/zubud/, www.vis.uky.edu/~stewe/ukbench/, mars0.stanford.edu/mvs_images_bbox/

Description:

List of databases currently considered for CDVS consists of 7 datasets, the two famous ZuBuD and the university of Kentucky DB, and 5 produced by the proponents. ZuBud database contains pictures of 200 buildings in Zurich, shot by 2 cameras under different viewing conditions (1000 reference images, 115 query images). University of Kentucky DB contains 10200 images, 4 views of object, 2550 objects, first image of each object is a query image. Stanford DB has 1200 objects (8 categories), 3300 query images. ETRI DB has 39 objects, captured with 22.5 degree changes in viewpoints, captured by using 4 cameras, and having a total of 3800 images 14 buildings, 150 query images. Peking University DB has 198 buildings, 13179 images (query or reference). Telecom Italia DB has 180 landmarks/buildings, 1440 images, 180 videos of each building, of 10 seconds each. Telecom SudParis DB has 35 buildings, 600 images (query or reference). In total the databases cover over 34K of images.

Access:

ZuBud Database TAR-GZIP (~486MB)
http://www.vision.ee.ethz.ch/showroom/zubud/ZuBuD.tar.gz
ZuBuD Query Images TAR-GZIP (~3.1MB)
http://www.vision.ee.ethz.ch/showroom/zubud/qimages.tar.gz
University of Kentucky Recognition Benchmark Images ZIP (~2GB)
http://www.vis.uky.edu/%7Estewe/ukbench/ukbench.zip
Stanford Database
mars0.stanford.edu/mvs_images_bbox/

Contacts:

For MPEG CDVS project:
Giovanni Cordara (giovanni.cordara@telecomitalia.it)

Qualinet partner: NO

2.1.3 No-reference assessment of blur and noise impacts on image quality

Link: http://www.ee.bgu.ac.il/~itzik/nr_quality/

Description:

The method was examined with a set of 75 different monochrome 256 × 256 pixel natural images. The test (original) images were used to generate images distorted by noise and blur, as shown in Fig. 5 for one of the images. The results of distortion impacts on image quality were derived using only the degraded images.

Access:

Link: http://www.ee.bgu.ac.il/~itzik/nr_quality/

References:

[CY10] Cohen, E., Yitzhaky, Y., No-reference assessment of blur and noise impacts on image quality, Signal, Image and Video Processing 4 (3), pp. 289-302.

Qualinet partner: NO

2.1.4 MDSP Super-Resolution And Demosaicing Datasets

Link: http://users.soe.ucsc.edu/~milanfar/software/sr-datasets.html

Description:

These data sets have been gathered through the past several years in the Multi-Dimensional Signal Processing Research Group (MDSP). For simultaneous demosaicing/superres there are Raw CFA Demosaicing Data Sets. The frames are available in AVI format and in MATLAB ".mat" format.

Access:

The list of databases is available at the link:
Link: http://users.soe.ucsc.edu/~milanfar/software/sr-datasets.html

Citation:

Please be sure to include a link to this page (http://www.soe.ucsc.edu/~milanfar/software/sr-datasets.html) whenever you use any of these data in a publication.

Qualinet partner: NO

2.1.5 Image Databases at the Image Sciences Institute (UMC Utrecht)

Link: http://www.isi.uu.nl/Research/Databases/

Description:

Publicly available annotated image databases facilitate comparative studies. These databases have been made available by the Image Sciences Institute. There are medical segmentation databases Digital Retinal Images for Vessel Extraction: DRIVE database, Segmentation of Chest Radiographs: SCR database, Standardized Evaluation Methodology for 2D-3D Registration: GS database, SLIVER07: segmentation of the liver in abdominal CT scans, CAUSE07: caudate segmentation in brain MRI scans.

Access:

The list of databases is available at the link:
Link: http://www.isi.uu.nl/Research/Databases/

Qualinet partner: NO

2.1.6 The Barcelona Calibrated Images Database

Link: http://www.cvc.uab.es/color_calibration/Database.html

Description:

The database of images has been gathered using a calibrated camera and it accommodates a grey ball of known reflectance on the lower-left side of the image. Calibrating the camera aim at defining the chromatic properties of the light hitting each sensor unit (pixel) in a device-independent color space such as the CIE1931 XYZ and by adding this ball. The dataset can be used in color constancy studies or surface reflectance studies. There images of various scene types: Urban scenery, Forest & Motorways, Snow & Seaside, Natural objects 01, Natural objects 02, Natural objects 03, Natural objects 04.

Access:

The list of images is available at the link:
Link: http://www.cvc.uab.es/color_calibration/Database.html

References:

[PBV10] Parraga, C. A., Baldrich, R. & Vanrell, M. Accurate Mapping of Natural Scenes Radiance to Cone Activation Space: A New Image Dataset. in CGIV 2010/MCS'10 - 5th

European Conference on Colour in Graphics, Imaging, and Vision - 12th International Symposium on Multispectral Colour Science. (Society for Imaging Science and Technology).
[PVV09] Párraga, C. A., Vazquez-Corral, J., & Vanrell, M. (2009). A new cone activation-based natural images dataset. Perception, 36(Suppl), 180.
[VPV09]Vazquez, J., Párraga, C. A., Vanrell, M., & Baldrich, R. (2009). Color Constancy Algorithms: Psychophysical Evaluation on a New Dataset. Journal of Imaging Science and Technology, 53(3), 0311051-0311059.

Qualinet partner: NO

2.1.7 McGill Calibrated Colour Image Database

Link: http://tabby.vision.mcgill.ca/html/welcome.html

Description:

The purpose of this database is to provide a large number of color images of natural scenes, calibrated, if required, for use in biological and computer vision research. So far there is over 850 images and the number is increasing each month.

Access:

The list of images is available at the link:
Link: http://tabby.vision.mcgill.ca/html/browsedownload.html

Citation:

The images are free for research, but not commercial, purposes. If you use our images, please cite us! [OK04]

References:

[OK04] Olmos, A. and Kingdom, F. A. A. (2004) McGill Calibrated Colour Image Database, http://tabby.vision.mcgill.ca.

Qualinet partner: NO

2.1.8 ADIAC Diatom Image Database

Link: http://rbg-web2.rbge.org.uk/ADIAC/db/adiacdb.htm

Description:

This database contains images acquired as part of the ADIAC project (= Automatic Diatom Identification and Classification), which aims at developing a fully automated, unsupervised system for the identification of diatoms. As part of this, a large reference database is required which contains "standards" that each input specimen has to be compared against. Here, we are making these images available for public use, as they are obviously also useful as a supplementary identification aid. All images are acquired as 8-bit greyscales using brightfield light microscopy and a 1018x1008 pixel CCD camera.

Access:

The list of images is available at the link:
Link: http://rbg-web2.rbge.org.uk/ADIAC/db/adiacdb.htm

Qualinet partner: NO

2.1.9 Computer Vision Databases – Columbia University

Link: http://www.cs.columbia.edu/CAVE/databases/

Description:

This repository lists various image databases from area of computer vision, COIL-20: Columbia Object Image Library, COIL-100: Columbia Object Image Library, Contaminants Database, CURET: Columbia-Utrecht Reflectance and Texture Database, DoRF & EMoR: Camera Response Database and Model, FaceTracer Database, Multispectral Images Database, PubFig: Public Figures Face Database, Rain Streak Database, Splash Database, VisualEyes: Exploring the World in Eyes, WILD: Weather and Illumination Database.

Access:

The list of databases is available at the link:
Link: http://www.cs.columbia.edu/CAVE/databases/

Qualinet partner: NO

2.1.10 The (New) Stanford Light Field Archive

Link: http://lightfield.stanford.edu/lfs.html

Description:

There are common light fields in this archive including The Stanford Bunny. For each light field, there is a link to the imagery - sometimes in several forms, and sometimes accompanied by calibration information. Following this is a link that allows you to view the light field in your browser using our Flash-based light field viewer.

Access:

The list of lighfields is available at the link:
Link: http://lightfield.stanford.edu/lfs.html

Qualinet partner: NO

2.1.11 Databases or Datasets for Computer Vision Applications and Testing

Link: http://datasets.visionbib.com/index.html

Description:

Test data is available in bits and pieces and in several larger repositories, These listed datasets are selected from the references in the Computer Vision Bibliography.

Access:

The links on the Author and Journal references in the list point to entries in that database:
Link: http://datasets.visionbib.com/index.html

Qualinet partner: NO

2.1.12 Computer Vision Test Images

Link: http://www-2.cs.cmu.edu/~cil/v-images.html

Description:

This repository lists various image databases from area of computer vision.

Access:

The list of databases is available at the link:
Link: http://www-2.cs.cmu.edu/~cil/v-images.html

Qualinet partner: NO

2.1.13 Noisy Visible Wavelength Iris Image Databases

Link: http://iris.di.ubi.pt/

Description:

Within the biometrics context, the iris is commonly accepted as one of the most accurate biometric traits and has been successfully applied in such distinct domains as airport check-in or refugee control. However, for the sake of accuracy, present iris recognition systems require that subjects stand close (less than two meters) to the imaging camera and look for a period of about three seconds until the data is captured. This cooperative behavior is required to capture images with enough quality for the recognition task. However, it simultaneously restricts the range of domains where iris recognition can be applied, especially those where the subjects cooperation is not expectable (e.g., criminal/terrorist seek, missing children). The main focus of the UBIRIS database is to minimize the requirement of user cooperation, i.e., the analysis and proposal of methods for the automatic recognition of individuals, using images of their iris captured at-a-distance and minimizing the required degree of cooperation from the users, probably even in the covert mode.
UBIRIS.v1 - This version of the database is composed of 1 877 images collected from 241 eyes during September, 2004 in two distinct sessions. It simulates less constrained imaging conditions. It is public and free available.
UBIRIS.v2 - The second version of the UBIRIS database has over 11 000 images (and continuously growing) and more realistic noise factors. Images were actually captured at-a-distance and on-the-move.

Access:

In order to access the UBIRIS.v1 database, it must be sent an email to one of the authors (hugomcp@di.ubi.pt, lfbaa@di.ubi.pt) asking for the password of the zip file.
All requests for the UBIRIS.v2 database must be directed (by email) to the following address: hugomcp@di.ubi.pt. Applicants should manually fill, sign, scan and attach the application form to the given email address. Upon receipt of an executed copy of the signed application form, access instructions will be given.
Link: http://iris.di.ubi.pt/ubiris2.html

Citation:

Please use the following reference when using UBIRIS [PA05]. All documents and papers that report on research that uses the UBIRIS.v2 database must database by including an appropriate citation [PFS2010].

Copyright notice:

A copy of all reports and papers that use the UBIRIS.v2 database and are for public or general release must be forwarded immediately upon release or publication to the SOCIA Lab. email address: socia@di.ubi.pt.

References:

[PA05] Proença, H., Alexandre, L. A. UBIRIS: A noisy iris image database, 13th International Conference on Image Analysis and Processing - ICIAP 2005, Springer, LNCS 3617, pp. 970-977, Cagliari, Italy, September 2005.
[PFS10] Proença, H., Filipe, S., Santos, R., Oliveira, J., Alexandre, L.A. The UBIRIS.v2: A Database of Visible Wavelength Iris Images Captured On-The-Move and At-A-Distance, IEEE Transactions on Pattern Analysis and Machine Intelligence, August, 2010, volume 32, number 8, pp. 1529-1535, ISSN: 0162-8828.

Contacts:

SOCIA Lab.: Soft Computing and Image Analysis Group
Department of Computer Science, University of Beira Interior, 6201-001 Covilha, Portugal
Hugo Proença (hugomcp@di.ubi.pt)

Qualinet partner: YES

2.1.14 The HDR Photographic Survey

Link: http://www.cis.rit.edu/fairchild/HDR.html

Description:

The High-Dynamic-Range (HDR) Photographic Survey is a database of HDR photographs accompanied by detailed colorimetric/luminance measurements and visual appearance scaling from the original scenes. The images provide a range of content and challenges along with the fundamental data required to evaluate HDR imaging algorithms for both preference and accuracy reproduction. All images are been placed in the public domain for non-commercial research purposes. There are 106 images in all, twenty-eight have accompanying colorimetric and appearance data. The remaining images have various data associated with them, but as a minimum have an absolute luminance calibration.

Access:

The dataset can be downloaded through thumbnails page:
Link: http://www.cis.rit.edu/fairchild/HDRPS/HDRthumbs.html
System characterization is available at:
Link: http://www.cis.rit.edu/fairchild/HDRPS/HDRcharacterization.html

Citation:

Please cite the paper [Fai07] if you use The HDR Photographic Survey.

Copyright notice:

All images have been placed in the public domain for non-commercial research purposes.

Contacts:

Prof. Mark Fairchild, College of Science Professor & Director, Program of Color Science/Munsell Color Science Laboratory Rochester Institute of Technology, (http://www.cis.rit.edu/fairchild/index.html)

References:

[Fai07] Fairchild, M.D., The HDR photographic survey, Final Program and Proceedings - IS and T/SID Color Imaging Conference, 2007, pp. 233-238.

Qualinet partner: NO

2.1.15 PFSTOOLS HDR Image Gallery

Link: http://pfstools.sourceforge.net/hdr_gallery.html

Description:

The gallery includes eight HDR images under a liberal Creative Commons license, which can be downloaded to start experimenting with HDR. Although there are thousands of tone-mapped "HDR" images on Flickr, the original HDR images are usually not available. The images in this gallery do not have much artistic value but should be good enough to try different algorithms.

Access:

The images can be downloaded separately:
Link: http://pfstools.sourceforge.net/hdr_gallery.html
All images in a single ZIP file (66.4MB):
Link:
http://sourceforge.net/projects/pfstools/files/hdr_images/1.0/pfstools_hdr_images.zip/download

Citation:

Please cite the paper [MKM07] if you use the gallery.

Copyright notice:

The images are under a liberal Creative Commons license.

Contacts:

Rafał Mantiuk (http://pages.bangor.ac.uk/~eesa0c/, mantiuk@gmail.com)

References:

[MKM07] Rafał Mantiuk, Grzegorz Krawczyk, Radosław Mantiuk and Hans-Peter, Seidel High Dynamic Range Imaging Pipeline: Perception-motivated Representation of Visual Content, In: Proc of SPIE (6492-212). Human Vision and Electronic Imaging XII. 2007.

Qualinet partner: NO

2.1.16 Funt et al. HDR Dataset

Link: http://www.cs.sfu.ca/~colour/data/funt_hdr/

Description:

The following is a data set of images of 105 scenes captured using a Nikon D700 digital still camera. The camera's auto-bracketing was used to capture up to 9 images of exposures with 1 EV (exposure value) difference between each in the sequence. The rate of capture was 5 frames per second. The exposure range was set to ensure that in each set there would be at least one image with maximum digital count less than 10321. During bracketing, the camera was set to allow it to adjust the shutter speed and/or the aperture setting automatically between frames in order to change the exposure by 1EV. In other words, the f-stop setting was not fixed. All images were recorded in Nikon's NEF raw data format. The raw images were then processed in two ways. The first was to create almost-raw 16-bit Portable Network Graphics (PNG) format (lossless compression) images from the NEF data, one image per exposure value. We will refer to these 16-bit PNGs as the 'base images'. The second was to create a set of HDR (high dynamic range) images from the base images. Two sets of base images were captured for each scene. One set includes 4 Gretag Macbeth mini Colorcheckers positioned at different angles with respect to one another. The second set contained images of the same scene, but without the Colorcheckers. Between taking the two image sets, the camera was refocused and possibly moved slightly. For the first set, the focus was adjusted so the Colorcheckers were in focus. For the second set, the focus was optimized for the scene overall. (In the cases when only the first set is available, the Colorcheckers are cropped out to form the second set). To create the base images, the raw NEF images were decoded using dcraw (more specifically Windows executable dcrawMS.exe). To preserve the original digital counts for each of the RGB channels, demosaicing was not enabled. The camera outputs 14-bit data per channel so the range of possible digital counts is 0 to 16383. The raw images contain 4284x2844 14-bit values in an RGGB pattern. To create a color image the two G values were averaged, but no further demosaicing was done. This results in a 2142x1422 RGB image. An HDR image was also constructed from each set of base images. The base images require alignment, which was done by the simple Median Threshold Bitmap

approach (Ward 2003). After applying a 3x3 median filter to the base images, the Matlab function makehdr from the Matlab Image Processing Toolbox was used to combine them into one HDR image. To ensure the reliability of the pixel values, all base image pixels having values greater than 13004 or less than 30 were excluded. The final HDR images may vary slightly in size due to possible cropping at the boundaries of the images as they are aligned.

Access:

HDR images can be downloaded in one ZIP file (1.8GB):
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/HDR.zip
Base images are also available (Divided into 15 parts, 1~2GB each), File Name: set_name + image_name + shutter_speed + aperture + iso + time:
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S00.zip
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S01.zip
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S02.zip
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S03.zip
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S04.zip
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S05.zip
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S06.zip
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S07a.zip
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S07b.zip
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S08.zip
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S09.zip
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S10.zip
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S11.zip
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S12.zip
Link: http://www.cs.sfu.ca/~colour/data2/funt_hdr/PNG_S13.zip
Measured Illumination: (White patch values of the 4 Colorcheckers of each set):
Image Filelist:
http://www.cs.sfu.ca/~colour/data2/funt_hdr/real_illum.zip
HDR image list: set names of 105 HDR images:
http://www.cs.sfu.ca/~colour/data2/funt_hdr/Filelist_hdr.txt
Base image list 1: filenames of 105 base images >= 10321:
http://www.cs.sfu.ca/~colour/data2/funt_hdr/Filelist_base_unsaturated_10321_med5x5.txt
Base image list 1: filenames of 105 base images >= 11000:
http://www.cs.sfu.ca/~colour/data2/funt_hdr/Filelist_base_unsaturated_11000_med5x5.txt

Citation:

Please cite the papers [FS10a], [FS10b] if you use the gallery.

Contacts:

Briant Funt (http://www.cs.sfu.ca/~funt, funt@cs.sfu.ca)

References:

[FS10a] Funt, B. and Shi, L., The Rehabilitation of MaxRGB, Proc. IS&T Eighteenth Color Imaging Conference, San Antonio, Nov. 2010.
[FS10b] Funt, B. and Shi, L., The Effect of Exposure on MaxRGB Color Constancy, Proc. SPIE Volume 7527 Human Vision and Electronic Imaging XV, San Jose, Jan. 2010.

Qualinet partner: NO

2.1.17 High Dynamic Range Specific Image Dataset (HDRSID)

Link: http://faculties.sbu.ac.ir/~moghaddam/index.php/main/page/10

Description:

All the researches need some sort of dataset as a benchmark to test their algorithms on and image processing research area specifically High Dynamic Range related researches is not an exception. In this section we produce a new High Dynamic Range Specific Image Dataset (HDRSID), which formed from more than two hundreds high resolutions HDR images specifically designed for HDR related researches. The proposed dataset consists of 230 high dynamic range images that make it the biggest HDR specific dataset introduced so far. All HDR images in this dataset produced using multi exposure capturing technique which is a common approach for recording high dynamic range images. Our dataset produced from 1449 base images with resolution of 5118 x 3288 pixels which make the dataset an appropriate choice for testing and evaluating tone mapping algorithms in real world applications in terms of resolution. To form a HDR specific dataset that can be used in high dynamic range research area for testing and evaluating cutting edge tone mapping algorithms, there is a need for creating a dataset that complies with the range of images that exists in real world applications such as smartphones, tablets, and compact digital cameras that offer high resolution camera sensors. For this purpose, we used a DSLR camera, Canon 550D with a maximum resolution of 16 megapixels for recording base images and so producing HDR image with the same resolution.

Access:

HDR images can be downloaded in a set of 9 RAR archives (1GB each):
Link: http://faculties.sbu.ac.ir/~moghaddam/contents/HDR/hdr/HDRDataset.part01.rar
Link: http://faculties.sbu.ac.ir/~moghaddam/contents/HDR/hdr/HDRDataset.part02.rar
Link: http://faculties.sbu.ac.ir/~moghaddam/contents/HDR/hdr/HDRDataset.part03.rar
Link: http://faculties.sbu.ac.ir/~moghaddam/contents/HDR/hdr/HDRDataset.part04.rar
Link: http://faculties.sbu.ac.ir/~moghaddam/contents/HDR/hdr/HDRDataset.part05.rar
Link: http://faculties.sbu.ac.ir/~moghaddam/contents/HDR/hdr/HDRDataset.part06.rar
Link: http://faculties.sbu.ac.ir/~moghaddam/contents/HDR/hdr/HDRDataset.part07.rar
Link: http://faculties.sbu.ac.ir/~moghaddam/contents/HDR/hdr/HDRDataset.part08.rar
Link: http://faculties.sbu.ac.ir/~moghaddam/contents/HDR/hdr/HDRDataset.part09.rar

Contacts:

Mohsen Ebrahimi Moghaddam (m_moghadam@sbu.ac.ir)

Qualinet partner: NO

2.1.18 UWM High Dynamic Range Imaging Dataset

Link: http://pages.cs.wisc.edu/~csverma/CS766_09/HDRI/hdr.html

Description:

The dataset contains 4 HDR image sets of LDR exposures taken in Madison Capitol building.

Access:

Preview of LDR sets is available at:
Link: http://pages.cs.wisc.edu/~csverma/CS766_09/HDRI/DataSet/HDRImageSet.html
HDR images can be downloaded as sets of LDR exposures in one TAR archive:
Link: http://pages.cs.wisc.edu/~csverma/CS766_09/HDRI/DataSet/Set1/set1images.tar
Link: http://pages.cs.wisc.edu/~csverma/CS766_09/HDRI/DataSet/Set2/set2images.tar
Link: http://pages.cs.wisc.edu/~csverma/CS766_09/HDRI/DataSet/Set3/set3images.tar
Link: http://pages.cs.wisc.edu/~csverma/CS766_09/HDRI/DataSet/Set4/set4images.tar

Contacts:

Chaman Singh Verma (http://pages.cs.wisc.edu/~csverma/)

Qualinet partner: NO

2.1.19 DEIMOS HDR Image Dataset

Link: http://deimos-project.cz/tag/hdr

Description:

The DEIMOS (DatabasE of Images: Open Source) database is created as an open-source database of images and videos for testing, verification and comparing of various image and/or video processing techniques such as enhancing, compression and reconstruction. The dataset contains 79 HDR images, each represented with 16 LDR exposures. The source LDR images are available for download as JPEG and upon request also as RAW image files.

Access:

All materials are available upon request Karel Fliegel (fliegek@fel.cvut.cz) through DEIMOS database. Selection from 79 HDR images can be downloaded in a set of 16 LDR exposures of JPEG files:
Link: http://deimos-project.cz/tag/hdr
Raw image files in NEF format (Nikon D90) and OpenEXR HDR image files can be obtained upon request.

Citation:

In publications using the database, the DEIMOS project description paper should be cited [KFP11].

Contacts:

Information for the database may be obtained by contacting
Karel Fliegel (fliegek@fel.cvut.cz)

References:

[KFP11] Klíma, M., Fliegel, K., Páta, P., Vítek, S., Blažek, M., Dostál, P., Krasula, L., Kratochvíl, T., Říčný, V., Slanina, M., Polák, L., Kaller, O., Boleček, L. DEIMOS – an Open Source Image Database, Radioengineering, 2011, vol. 20, no. 4, p. 1016-1023, ISSN 1210-2512.

Qualinet partner: YES

2.1.20 California-ND: An Annotated Dataset for Near-Duplicate Detection in Personal Photo Collections

Link: http://vintage.winklerbros.net/californiaND.html

Description:

Managing photo collections involves a variety of image quality assessment tasks, e.g. the selection of the "best" photos. Detecting near-duplicates is a prerequisite for automating these tasks. The California-ND dataset was created to assist researchers in testing algorithms for the detection of near duplicate images. Contrary to other existing datasets in this domain, California-ND contains 701 photos taken directly from a real user's personal photo collection. As a result, while including many challenging non-identical near-duplicate cases without the use of artificial image transformations. The original image sequence was maintained as much as possible. More importantly, in order to deal with the inevitable subjectivity and ambiguity that near-duplicate cases exhibit, the dataset is annotated by 10 different subjects, including the photographer himself. These annotations can be combined into a non-binary ground truth, representing the probability that a pair of images is considered a near-duplicate.

Access:

The dataset is released under a creative commons license and can be downloaded here:
Link: http://vintage.winklerbros.net/californiaND.zip
The zip-file is encrypted; please email (bbonik@adsc.com.sg) for the password.

Citation:

Please cite the paper [JVW13] if you use the California-ND dataset.

Copyright notice:

The dataset is released under a creative commons license (http://creativecommons.org/licenses/by-nc-nd/3.0/).

Contacts:

Dr. Stefan Winkler, Vision & InterAction Group (Vintage), Advanced Digital Sciences Center (ADSC), University of Illinois at Urbana-Champaign (UIUC), (http://stefan.winkler.net/)

References:

[JVW13] A. Jinda-Apiraksa, V. Vonikakis, S. Winkler.California-ND: An annotated dataset for near-duplicate detection in personal photo collections. Proc. 5th International Workshop on Quality of Multimedia Experience (QoMEX), Klagenfurt, Austria, July 3-5, 2013.

Qualinet partner: NO

2.1.21 Stanford Mobile Visual Search Dataset

Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2011/stanford/

Description:

Stanford Mobile Visual Search data set contains camera-phone images of products, CDs, books, outdoor landmarks, business cards, text documents, museum paintings and video clips. The data set has several key characteristics lacking in existing data sets: rigid objects, widely varying lighting conditions, perspective distortion, foreground and background clutter, realistic ground-truth reference data, and query data collected from heterogeneous low and high-end camera phones.

Access:

The files are available for download via HTTP.
Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2011/stanford/
Images can be downloaded via HTTP:
Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2011/stanford/mvs_images/

References:

[CCT11] V. Chandrasekhar, D. Chen, S. Tsai, N. Cheung, H. Chen, G. Takacs, Y. Reznik, R. Vedantham, R. Grzeszczuk, J. Bach, B. Girod, The Stanford Mobile Visual Search Dataset, Proceedings of the First ACM Multimedia Systems Conference (MMSys), San Jose, CA, USA, February 23-25, 2011.

Qualinet partner: NO

2.1.22 2012 Social Event Detection Dataset

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

The dataset constitutes a challenging benchmark for methods that detect social events in large collections of multimedia items. More specifically, the dataset comprises more than 160 thousands of Flickr photos and their accompanying metadata, as well as a list of 149 manually selected and annotated target events, each of which is defined as a set of relevant photos. The paper also discusses the challenges defined as part of SED 2012, the data collection process, the dataset and its basic statistics, the ground truth creation and the suggested evaluation methodology.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
Direct link to the files:
Link: http://skuld.cs.umass.edu/traces/mmsys/2013/social2012/

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [PSM13] at the MMSys conference (Proceedings of ACM MMSys 13, February 27 - March 1, 2013, Oslo, Norway).

References:

[PSM13] Symeon Papadopoulos, Emmanouil Schinas, Vasileios Mezaris, Raphaël Troncy, Ioannis Kompatsiaris, The 2012 Social Event Detection Dataset, Proceedings of the 4th ACM Multimedia Systems Conferen (MMSys), Oslo, Norway, USA, February 27 - March 1, 2013.

Qualinet partner: NO

2.1.23 Fashion-focused Creative Commons Social dataset

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

A fashion-focused Creative Commons dataset is designed to contain a mix of general images as well as a large component of images that are focused on fashion (i.e., relevant to particular clothing items or fashion accessories). The dataset contains 4810 images and related metadata. Furthermore, a ground truth on image's tags is presented. Ground truth generation for large-scale datasets is a necessary but expensive task. Traditional expert based approaches have become an expensive and non-scalable solution. For this reason, we turn to crowdsourcing techniques in order to collect ground truth labels; in particular we make use of the commercial crowdsourcing platform, Amazon Mechanical Turk (AMT). Two different groups of annotators (i.e., trusted annotators known to the authors and crowdsourcing workers on AMT) participated in the ground truth creation. Annotation agreement between the two groups is analyzed. Applications of the dataset in different contexts are discussed. This dataset contributes to research areas such as crowdsourcing for multimedia, multimedia content analysis, and design of systems that can elicit fashion preferences from users.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
Direct link to the files:
Link: http://skuld.cs.umass.edu/traces/mmsys/2013/fashion/

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [LMG13] at the MMSys conference (Proceedings of ACM MMSys 13, February 27 - March 1, 2013, Oslo, Norway).

References:

[LMG13] Babak Loni, Maria Menendez, Mihai Georgescu, Luca Galli, Claudio Massari, Ismail Sengor Altingovde, Davide Martinenghi, Mark Melenhorst, Raynor Vliegendhart, Martha Larson, Fashion-focused creative commons social dataset, Proceedings of the 4th ACM Multimedia Systems Conferen (MMSys), Oslo, Norway, USA, February 27 - March 1, 2013.

Qualinet partner: NO

2.1.24 Fashion 10000: An Enriched Social Image Dataset for Fashion and Clothing

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

New social image dataset related to the fashion and clothing domain. The dataset contains more than 32000 images, their context and social metadata. Furthermore the dataset is enriched with several types of annotations collected from the Amazon Mechanical Turk (AMT) crowdsourcing platform, which can serve as ground truth for various content analysis algorithms. This dataset has been successfully used at the Crowdsourcing task of the 2013 MediaEval Multimedia Benchmarking initiative. The dataset contributes to several research areas such as Crowdsourcing, multimedia content and context analysis as well as hybrid human/automatic approaches. In this paper, the dataset is described in detail and the dataset collection strategy, statistics, applications of dataset and its contribution to MediaEval 2013 is discussed.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
The files are available in one archive (9.8GB) for download via HTTP:
Link: http://skuld.cs.umass.edu/traces/mmsys/2014/user05.tar

Contacts:

Information for the database may be obtained by contacting
Babak Loni (b.loni@tudelft.nl).

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [LCR14] at the MMSys conference (Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore).

References:

[LCR14] B. Loni, Lei Yen Cheung, M. Riegler, A. Bozzon, L. Gottlieb, M. Larson, Fashion 10000: an enriched social image dataset for fashion and clothing, Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore.

Qualinet partner: NO

2.1.25 World-Wide Scale Geotagged Image Dataset for Automatic Image Annotation and Reverse Geotagging

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

A dataset of geotagged photos on a world-wide scale is presented. The dataset contains a sample of more than 14 million geotagged photos crawled from Flickr with the corresponding metadata. To guarantee the spatial representativeness of the dataset, a crawling approach based on the small-world phenomena and the Flickr friendship's graph is applied. Furthermore, the noisiness of user-provided tags is reduced through an automatic tag cleaning approach. To enable efficient retrieval, photos in the dataset are indexed based on their location information using quad-tree data structure. The dataset can assists different applications, especially, search-based automatic image annotation and reverse geotagging.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
The files are available in one archive (79.3GB) for download via HTTP:
Link: http://skuld.cs.umass.edu/traces/mmsys/2014/user03.tar

Contacts:

Information for the database may be obtained by contacting
Hatem Mousselly-Sergieh (hatem.mousselly-sergieh@insa-lyon.fr).

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [MWH14] at the MMSys conference (Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore).

References:

[MWH14] H. Mousselly-Sergieh, D. Watzinger, B. Huber, M. Döller, E. Egyed-Zsigmond, H. Kosch, World-wide scale geotagged image dataset for automatic image annotation and reverse geotagging, Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore.

Qualinet partner: NO

2.1.26 Div400: A Social Image Retrieval Result Diversification Dataset

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

New dataset, Div400, was designed to support shared evaluation in different areas of social media photo retrieval, e.g., machine analysis (re-ranking, machine learning), human-based computation (crowdsourcing) or hybrid approaches (relevance feedback, machine-crowd integration). Div400 comes with associated relevance and diversity assessments performed by human annotators. 396 landmark locations are represented via 43,418 Flickr photos and metadata, Wikipedia pages and content descriptors for text and visual modalities. To facilitate distribution, only Creative Commons content was included in the dataset. The proposed dataset was validated during the 2013 Retrieving Diverse Social Images Task at the MediaEval Benchmarking Initiative for Multimedia Evaluation.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
The files are available in one archive (7.6GB) for download via HTTP:
Link: http://skuld.cs.umass.edu/traces/mmsys/2014/user01.tar

Contacts:

Information for the database may be obtained by contacting
Bogdan Ionescu (bionescu@imag.pub.ro).

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [IRM14] at the MMSys conference (Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore).

References:

[IRM14] B. Ionescu, A.-L. Radu, M. Menéndez, H. Müller, A. Popescu, B. Loni, Div400: a social image retrieval result diversification dataset, Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore.

Qualinet partner: NO

2.1.27 Div150Cred: A Social Image Retrieval Result Diversification with User Tagging Credibility Dataset

Link: http://imag.pub.ro/~bionescu/index_files/Page13170.htm

Description:

In this paper we introduce a new dataset and its evaluation tools, Div150Cred, that was designed to support shared evaluation of diversification techniques in different areas of social media photo retrieval and related areas. The dataset comes with associated relevance and diversity assessments performed by human annotators. The data consists of 300 landmark locations represented via 45,375 Flickr photos, 16M photo links for around 3,000 users, metadata, Wikipedia pages and content descriptors for text and visual modalities. To facilitate distribution, only Creative Commons content was included in the dataset. The proposed dataset was validated during the 2014 Retrieving Diverse Social Images Task at the MediaEval Benchmarking Initiative.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Contacts:

Bogdan Ionescu (bionescu@imag.pub.ro)

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [IPL15] at the MMSys conference (Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015).

References:

[IPL15] B. Ionescu, A. Popescu, M. Lupu, A. Gînscă, B. Boteanu, H. Müller. Div150Cred: A Social Image Retrieval Result Diversification with User Tagging Credibility Dataset, Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015.

Qualinet partner: NO

2.1.28 ReSEED: Social Event dEtection Dataset

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

There is an urgent need to develop algorithms which are capable of grouping media by the social events they depict or are related to. In order to train, test, and evaluate such algorithms and frameworks, we present a dataset that consists of about 430,000 photos from Flickr together with the underlying ground truth consisting of about 21,000 social events. All the photos are accompanied by their textual metadata. The ground truth for the event groupings has been derived from event calendars on the Web that have been created collaboratively by people. The dataset has been used in the Social Event Detection (SED) task that was part of the MediaEval Benchmark for Multimedia Evaluation 2013. This task required participants to discover social events and organize the related media items in event-specific clusters within a collection of Web multimedia documents.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
The files are available in one archive (121GB) for download via HTTP:
Link: http://skuld.cs.umass.edu/traces/mmsys/2014/user04.tar

Contacts:

Information for the database may be obtained by contacting
Timo Reuter (treuter@cit-ec.uni-bielefeld.de).

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [RPM14] at the MMSys conference (Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore).

References:

[RPM14] T. Reuter, S. Papadopoulos, V. Mezaris, P. Cimiano, ReSEED: social event dEtection dataset, Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore.

Qualinet partner: NO

2.1.29 Empa HDR Image Database

Link: http://empamedia.ethz.ch/hdrdatabase/index.php

Description:

Empa HDR Image Database evolved from projects on HDR research carried out at Empa in the years 2011-2013 with partial support of the COST action IC1005 on HDRI. All images are placed in the public domain exclusively for non-commercial research purposes.There are 33 scenes, consisting of the images from the exposure bracketing, resulting exr and hdr files, and a tone mapped jpeg. The zip file contains all files. The exr and hdr files can be downloaded individually, if desired. Furthermore, there are 3 image sequences that can be turned into videos using the time lapse or stop motion technique.

Access:

The dataset can be downloaded through thumbnails page:

Link: http://empamedia.ethz.ch/hdrdatabase/index.php

Contacts:

For questions, contact:
Iris Sprow (iris.sprow@empa.ch)
Peter Zolliker (peter.zolliker@empa.ch)

Qualinet partner: NO

2.1.30 RAISE - A Raw Images Dataset for Digital Image Forensics

Link: http://mmlab.science.unitn.it/RAISE/

Description:

Digital forensics is a relatively new research area which aims at authenticating digital media by detecting possible digital forgeries. Indeed, the ever increasing availability of multimedia data on the web, coupled with the great advances reached by computer graphical tools, makes the modification of an image and the creation of visually compelling forgeries an easy task for any user. This in turns creates the need of reliable tools to validate the trustworthiness of the represented information. In such a context, we present here RAISE, a large dataset of 8156 high-resolution raw images, depicting various subjects and scenarios, properly annotated and available together with accompanying metadata. Such a wide collection of untouched and diverse data is intended to become a powerful resource for, but not limited to, forensic researchers by providing a common benchmark for a fair comparison, testing and evaluation of existing and next generation forensic algorithms. In this paper we describe how RAISE has been collected and organized, discuss how digital image forensics and many other multimedia research areas may benefit of this new publicly available benchmark dataset and test a very recent forensic technique for JPEG compression detection.

Access:

The files are available for download via HTTP.
Link: http://mmlab.science.unitn.it/RAISE/

Contacts:

Duc-Tien Dang-Nguyen (ductien.dangnguyen@diee.unica.it)

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [DPC15] at the MMSys conference (Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015).

References:

[DPC15] D. Dang-Nguyen, C. Pasquini, V. Conotter, G. Boato. RAISE - A Raw Images Dataset for Digital Image Forensics, Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015.

Qualinet partner: NO

2.1.31 The Toulouse Vanishing Points Dataset

Link: http://ubee.enseeiht.fr/tvpd/

Description:

In this paper we present the Toulouse Vanishing Points Dataset, a public photographs database of Manhattan scenes taken with an iPad Air 1. The purpose of this dataset is the evaluation of

vanishing points estimation algorithms. Its originality is the addition of Inertial Measurement Unit (IMU) data synchronized with the camera under the form of rotation matrices. Moreover, contrary to existing works which provide vanishing points of reference in the form of single points, we computed uncertainty regions.

Access:

The files are available for download via HTTP.
Link: http://ubee.enseeiht.fr/tvpd/

Contacts:

Vincent Angladon (vincent.angladon@irit.fr)

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [AGC15] at the MMSys conference (Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015).

References:

[AGC15] V. Angladon, S. Gasparini, V. Charvillat. The Toulouse Vanishing Points Datase, Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015.

Qualinet partner: NO

2.2 Video Databases

2.2.1 Consumer Digital Video Library (CDVL)

Link: http://www.cdvl.org/

Description:

One of interesting databases is the Consumer Digital Video Library (CDVL). This database contains a collection of high-quality uncompressed videos. Some of these videos have also subjective ratings. CDVL is a digital video library intended for researchers and developers in the fields of video processing and visual quality (both objective and subjective assessment).

Access:

Registration required
Link: http://www.cdvl.org/

Copyright notice:

NTIA/ITS hereby grants permission for you (or your organization) to use the Consumer Digital Video Library Website ("CDVL Web") and any video clips or other content posted thereon ("Website Content"), solely for internal research and development purposes to process and assess audio and/or video quality. You will not use, copy, reproduce, distribute, modify, prepare derivative works, transmit, broadcast, display, sell, license or otherwise exploit the Website Content for any other purpose whatsoever. You shall not distribute any Website Content to any third party. You agree to destroy any and all copies of Website Content, if any are made, upon conclusion of the relevant audio or video processing and/or testing.

Qualinet partner: NO

2.2.2 TUM-LDV Multi Format Test Set

Link: http://www.ldv.ei.tum.de/en/research/videolab/multiformat-testset/

Description:

The TUM Multi Format Test Set consists of 48 different video sequences in SDTV and HDTV formats. They cover a wide range of different content classes from sport to film, but also include typical video test sequences.

Access:

All video sequencs are available as single frame images in the TIFF format and can be downloaded via FTP.
Link: ftp://ftp.ldv.ei.tum.de/videolab/public/TUM_Multi_Format_Test_Set/
More information about the individual video sequences can be found in the following documents:
Link: http://www.ldv.ei.tum.de/uploads/media/TUM_Multi_Format_Test_Set_01.pdf
Link: http://www.ldv.ei.tum.de/uploads/media/TUM_Multi_Format_Test_Set_Overview_01.xls

Citaton:

In publications using the test set, the test set shall be cited as: Technische Universität München, Institute for Data Processing. (2011) TUM Multi Format Test Set. [Online]. Available: http://www.ldv.ei.tum.de/videolab

Copyright notice:

The TUM Multi Format Test Set is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Germany License. The use of the TUM Multi Format Test Set in any publication shall be attributed as: Technische Universität München, Institute for Data Processing. (2011) TUM Multi Format Test Set. [Online]. Available: ww.ldv.ei.tum.de/videolab. The video sequences of the TUM Multi Format Test Set have been generated by Videatis GmbH and all intellectual property rights remain with Videatis GmbH. Videatis GmbH has granted Technische Universität München, Lehrstuhl für Datenverarbeitung, the permission to redistribute the TUM Multi Format Test Set and make it publicly available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Germany License. Permissions beyond the scope of this license may be available by contacting Benedikt Wiedenmann at b.wiedenmann@videatis.com.

Contacts:

Christian Keimel (christian.keimel@tum.de)

Qualinet partner: YES

2.2.3 TU Delft EMMA: Database for emotion and mood recognition

Link: http://ii.tudelft.nl/iqlab/EMMA.html

Description:

EMMA is a collection of videos, recorded in the lab of the Interactive Intelligence Group of Delft University of Technology. We employed young Dutch actors to portray certain daily moods, occurring without interaction, such as sadness, anxiety and amusement. To make sure the actors were "into the mood", we induced to them the desired moods with music, inspired them with scenarios (receiving a phone call, looking for something they lost, etc.), and let them free to improvise according to their felt mood and the situation. We recorded with two cameras, one focused on the face and one capturing face and body, and with Microsoft Kinect, located at a distance of approximately 2 metres away from the actors. All sensors remained at fixed positions, to resemble a typical smart ambience equipped with sensors. The actors could move around the setting, including sitting on the chair/couch, walking and standing. Due to the actors' movements, the actor's face is not properly captured in a lot of frames. We used the Kinect, to

extract postural features, such as the joints and the rotational speed of the joints. We extracted the joints for each video offline in two modes: seated (10 joints) and standing (20 joints), each mode optimized for a different situation. Due to the suboptimal distance of Kinect from the actors, the skeleton joints are not detected in all frames of the videos. The joints are transcribed in separate text files, which can be downloaded under the title "Kinect joints".

Access:

All video sequences and other materials are available at the website.
Link: http://ii.tudelft.nl/iqlab/EMMA.html
The video files are password protected. To obtain them, contact Judith Redi (J.A.Redi@tudelft.nl).

Citation:

The data included in the database EMMA(videos, Kinect features, annotations) are publicly available to the research community. If you are using EMMA in your research, please cite the following paper [KR15].

Contacts:

Judith Redi (J.A.Redi@tudelft.nl)

References:

[KR15] Katsimerou C and Redi J, "Neural prediction of the user's mood from visual input", 5th International Workshop on Empathic Computing (IWEC 2014), 2014.

Qualinet partner: YES

2.2.4 TUM 1080p25 Data Set

Link: http://www.ldv.ei.tum.de/en/research/videolab/data-sets-downloads/tum-1080p25-data-set/

Description:

The TUM 1080p25 Data Set consists of the subjective test results and bitstreams of four different HDTV 1080p25 video sequences of the SVT test set (CrowdRun, InToTree, OldTownCross and ParkJoy), encoded with two H.264/AVC encoder settings and Dirac at four different rate points between 5-30 MBit/s, resulting in 48 different data points. For H.264/AVC, two different encoder settings were chosen, one low-complexity main profile (LC) and one high-complextiy high profile (HC). The bitstreams can be found in the corresponding sub directories and the subjective test results in the Excel sheet. The references from the SVT test set used to create the data set can be downloaded in YUV 4:2:0 8 Bit format from the folder References.

Access:

All video sequences and other materials are available via FTP.
Link: ftp://ftp.ldv.ei.tum.de/videolab/public/TUM_1080p25_Data_Set/

Citation:

The use of the TUM 1080p25 Data Set in any publication shall be attributed as [KHH10].

Copyright notice:

Contacts:

Christian Keimel (christian.keimel@tum.de)

References:

[KHH10] C. Keimel, J. Habigt, T. Habigt, M. Rothbucher, and K. Diepold, "Visual quality of current coding technologies at high definition IPTV bitrates," in Multimedia Signal Processing (MMSP), 2010 IEEE International Workshop on, 2010, pp.390 –393.

Qualinet partner: YES

2.2.5 LiU HDRv Repository

Link: http://www.hdrv.org/Resources.php

Description:

The dataset includes 12 HDR video sequences and 2 HDR video light probe sequences. The HDR video sequences are captured in different environments. Each full resolution frame from HDR video sequences is around 45 MB in size. The sequences have therefore been downsampled to 720p, i.e. 1280x720 pixels. All frames are stored in the OpenEXR file format.

Access:

All video sequences and other materials are available:
Link: http://www.hdrv.org/Resources.php

Citation:

If you wish to use this video sequence in your research, we kindly ask you cite the papers [KGB13], [KGY13], [EWM13].

Copyright notice:

All data, code and other information in the HDRv repository may be used freely under the terms of the creative commons license CC BY-NC 3.0 (http://creativecommons.org/licenses/by-nc/3.0/).

Contacts:

Jonas Unger (jonas.unger@liu.se)

References:

[KGB13] J. Kronander, S. Gustavson, G. Bonnet, J. Unger: Unified HDR Reconstruction from RAW CFA Data, In proceedings of the International Conference on Computational Photography (ICCP), 2013, Harvard University, Cambridge, USA, April, 2013.
[KGY13] J. Kronander, S. Gustavson, G. Bonnet, A. Ynnerman, J. Unger: A Unified Framework for Multi-Sensor HDR Video Reconstruction, Accepted for publication in Signal Processing: Image Communications, 2013.
[EWM13] Gabriel Eilertsen, Robert Wanat, Rafal Mantiuk, Jonas Unger: Evaluation of tone mapping operators for HDR-video, In Computer Grahpics Forum Special Issue Proceedings of Pacific Graphics, Singapore, 7-9 October, 2013.

Qualinet partner: NO

2.2.6 Distributed DASH Dataset

Link: http://www-itec.uni-klu.ac.at/dash/?page_id=958

Description:

D-DASH is a dataset of content for the Dynamic Adaptive Streaming over HTTP (DASH) standard from MPEG. It is mirrored over different sites at different locations to perform, e.g., CDN-based scientific evaluations. The delivery of multimedia content over HTTP and on top of existing Internet infrastructures is becoming the preferred method within heterogeneous

environment. The basic design principle is having an intelligent client which selects given and applicable media representations by issuing HTTP requests for individual segments based on the users' context and current conditions. Typically, this client behavior differs between implementations of the same kind and for the objective evaluations thereof appropriate datasets are needed. This paper presents a distributed dataset for the recently published MPEG-DASH standard which is mirrored at different sites across Europe, namely Klagenfurt, Paris, and Prague. A client implementation may choose to request segments from these sites and dynamically switch to a different location, e.g., in case the one currently used causes any issues. Hence, this distributed DASH dataset can be used for real-world evaluations enabling the simulation of switching between different content delivery networks. Finally, it is also offers a registration service for additional sites to join and, thus, expand the distribution of the dataset even further.

Access:

The content is available via HTTP:
Link: http://www-itec.aau.at/ftp/datasets/mmsys13/

Citation:

If you use our data for your own publications please do not forget to reference the website and our paper [LMT13].

Contacts:

Information for the database may be obtained by contacting
Christian Timmerer (christian.timmerer@itec.uni-klu.ac.at)

References:

[LMT13] Lederer, S., Mueller, C., Timmerer, C., Concolato, C., Le Feuvre, J., and Fliegel, K., 2013. Distributed DASH dataset. In Proceedings of the 4rd Multimedia Systems Conference (MMSys '13). ACM, New York, NY, USA.

Qualinet partner: YES

2.2.7 Ultra high definition HEVC DASH data set

Link: http://download.tsi.telecom-paristech.fr/gpac/dataset/dash/uhd/

Description:

The sequences provided in this dataset are a professional edit of several sequences shot during the 4Ever project (http://www.4ever-project.com/). The sequences have been captured using a Sony F65 in raw mode, processed in BT.709 Gamut. The edited sequence is an UHDTV 3840x2160 progressive video at 60 Hz, and lasts 8536 frames, which corresponds to 2 minutes, 22 seconds and 226 milliseconds (16 frames). The sequence has been spatially down-sampled to generate HD (1280x720p60) and Full HD (1920x1080p60) sequences, which in turn have been temporally down-sampled at 30 Hz. The UHDTV sequence has not been temporally down-sampled, as most subjective viewing tests conducted by the 4Ever project on 4K materials at 30 Hz were not advocating for this. The provided DASH sequences provide HEVC encoding ranging from 720p30 @ 2Mbps up to 2160p60 @ 20 Mbps, with one 1080p60 and one 2160p60 in 10 bits.

Access:

All video sequencs are available at HTTP:
Link: http://download.tsi.telecom-paristech.fr/gpac/dataset/dash/uhd/

Contacts:

Information for the database may be obtained by contacting
Jean Le Feuvre (jean.lefeuvre@telecom-paristech.fr).

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [LTP14] at the MMSys conference (Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore).

References:

[LTP14] J. Le Feuvre, J-M. Thiesse, M. Parmentier, M. Raulet, C. Daguet, Ultra high definition HEVC DASH data set, Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore.

Qualinet partner: NO

2.2.8 A Scalable Video Coding Dataset and Toolchain for Dynamic Adaptive Streaming over HTTP

Link: http://concert.itec.aau.at/SVCDataset/

Description:

With video streaming becoming more and more popular, the number of devices that are capable of streaming videos over the Internet is growing. This leads to a heterogeneous device landscape with varying demands. Dynamic Adaptive Streaming over HTTP (DASH) offers an elegant solution to these demands. Smart adaptation logics are able to adjust the clients' streaming quality according to several (local) parameters. Recent research indicated benefits of blending Scalable Video Coding (SVC) with DASH, especially considering Future Internet architectures. However, except for the DASH Dataset with a single SVC encoded video, no other datasets are publicly available. The contribution of this paper is two-fold. First, a DASH/SVC dataset, containing multiple videos at varying bitrates and spatial resolutions including 1080p, is presented. Second, a toolchain for multiplexing SVC encoded videos is provided, therefore making our results reproducible and allowing researchers to generate their own datasets.

Access:

The files are available for download via HTTP.
Link: http://concert.itec.aau.at/SVCDataset/

Contacts:

Christian Kreuzberger (christian.kreuzberger@itec.aau.at)

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers KPH15] at the MMSys conference (Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015).

References:

[KPH15] C. Kreuzberger, D. Posch, H. Hellwagner. A Scalable Video Coding Dataset and Toolchain for Dynamic Adaptive Streaming over HTTP, Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015.

Qualinet partner: YES

2.2.9 YUV 4:2:0 Video Sequences (TU Berlin)

Link: http://www.tkn.tu-berlin.de/research/evalvid/

Description:

This database contains common (Akiyo, Bridge (far), Bridge (close), Bus, Container, Coastguard, Flower, Football, Foreman, Hall, Highway, Mobile & Calendar, Mother & Daughter, News, Paris, Silent, Stefan, Tempete, Waterfall) YUV CIF, QCIF video sequences compressed in lossles H.264.

Access:

Lossles H.264 encoded YUV CIF reference videos
Link: http://www.tkn.tu-berlin.de/research/evalvid/cif.html
Lossles H.264 encoded YUV QCIF reference videos
Link: http://www.tkn.tu-berlin.de/research/evalvid/qcif.html

Qualinet partner: YES

2.2.10 Video Trace Library (ASU)

Link: http://trace.eas.asu.edu/index.html

Description:

This database contains sequences of commonly used video test sequences in the 4:2:0 YUV. All video sequences are compressed in the 7-Zip format. The available sequences (Akiyo - 300 Frames, Bridge (Close) - 2001 Frames, Bridge (Far) - 2101 Frames, Bus - 150 Frames, Carphone - 382 Frames, Claire - 494 Frames, Coastguard - 300 Frames, Container - 300 Frames, Flower - 250 Frames, Foreman - 300 Frames, Grandma - 870 Frames, Hall Monitor - 300 Frames, Highway - 2000 Frames, Miss America - 150 Frames, Mobile - 300 Frames, Mother and Daughter - 300 Frames, News - 300 Frames, Paris - 1065, Salesman - 449 Frames, Silent - 300 Frames, Stefan - 90 Frames, Suzie - 150 Frames, Tempete - 260 Frames, Waterfall - 260 Frames).

Access:

Link: http://trace.eas.asu.edu/yuv/index.html

Qualinet partner: NO

2.2.11 Digital Cinema Initiatives – StEM Material

Link: http://www.dcimovies.com/StEM/

Description:

This database contains ASC/DCI Standard Evaluation Material (StEM). The available material consists of StEM Uncompressed Mini-Movie with Trailer (2.39:1 scope aspect ratio) The material was designed and is licensable for the following purposes: Digital cinema testing and SMPTE image/video testing, Industry standards evaluations and demonstrations (e.g., SMPTE, ISO, etc.), Industry trade show demonstrations, and Educational purposes.

Access:

Link: http://store.smpte.org/category-s/31.htm

Qualinet partner: NO

2.2.12 EBU HD Test Sequences

Link: http://www.ebu.ch/fr/technical/hdtv/test_sequences.php

Description:

All material currently supplied via the EBU is provided as either 10-bit 4:2:2 in YUV10 or YUV16 file format or as 8-bit 4:2:2 material. All sequences are provided without audio. The Fairytale sequences are also available in full 16-bit RGB versions (sgi16).

Access:

Public FTP Download is available to non-Members as well.
Link: ftp://vqeg.its.bldrdoc.gov/HDTV/SVT_MultiFormat/

Qualinet partner: NO

2.2.13 Xiph.org Test Media

Link: http://media.xiph.org/video/derf/

Description:

All video sequences are in the uncompressed YUV4MPEG format used by the mjpegtools project unless otherwise indicated. This is the format accepted by the Theora encoder tools. Some encoding parameters such as framerate that were missing from the raw data have been guessed or inferred, and may be incorrect. All sequences listed here were available at one time on publicly accessible servers or were given to us explicitly to host here, and are believed to be freely redistributable. When available, the appropriate copyright information is included. Some may impose additional restrictions or limitations. See the appropriate copyright file for details. The list contains about 50 sequences with SD content and below, and about 30 sequences with HD content and above.

Access:

List of links is available at
Link: http://media.xiph.org/video/derf/

Qualinet partner: NO

2.2.14 Video Sequences Available from the University of Hannover

Link: http://www.tnt.uni-hannover.de/

Description:

Various video sequences from different projects in video compression.

Access:

Link: ftp://ftp.tnt.uni-hannover.de/pub/

Qualinet partner: NO

2.2.15 Motion Blur Datasets

Link: http://www.umiacs.umd.edu/~aagrawal/MotionBlur/index.html

Description:

This dataset is intended for evaluating different motion blur algorithms and capture procedures. These datasets include (a) high speed videos, (b) coded exposure images and (c) varying exposure images. All datasets are captured using a static camera.

Access:

The list of images is available at the link:
Link: http://www.umiacs.umd.edu/~aagrawal/MotionBlur/index.html

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Qualinet partner: NO

2.2.16 Sensory Experience Dataset

Link: http://selab.itec.aau.at/software-and-services/dataset/

Description:

Video Sequences enriched with Sensory Effects, 76 Video Sequences from 5 Genres, 38 Action 12 Documentary, 8 Sports, 5 News, 13 Commercial. Consumption of multimedia content may stimulate also other senses, Vision or audition, Olfaction, mechanoreception, equilibrioception, thermoception, etc. Annotation with metadata providing so-called sensory effects that steer appropriate devices capable of rendering these effects.

Access:

The size of the entire dataset is approx. 1.6GB and available on request only, i.e., you need to sign a non-disclosure agreement (NDA).
Link: http://selab.itec.aau.at/software-and-services/dataset/

Copyright notice:

Non-disclosure agreement (NDA) is available at (http://selab.itec.aau.at/nda/).

Contacts:

Information for the database may be obtained by contacting
Christian Timmerer (christian.timmerer@itec.uni-klu.ac.at)

References:

[WTR12] Waltl, M.; Timmerer, C.; Rainer, B.; Hellwagner, H.; , "Sensory effect dataset and test setups," Quality of Multimedia Experience (QoMEX), 2012 Fourth International Workshop on , vol., no., pp.115-120, 5-7 July 2012 doi: 10.1109/QoMEX.2012.6263841.

Qualinet partner: YES

2.2.17 Dynamic Adaptive Streaming over HTTP (DASH) Dataset

Link: http://www-itec.uni-klu.ac.at/dash/?page_id=207

Description:

Dataset with DASH Content, long sequences in high quality, free available for DASH experiments, PSNR values per frame. PSNR values are includes for the Big Buck Bunny content. This dataset was created with DASH content generation tool DASHEncoder. It is open source an available at: https://github.com/slederer/DASHEncoder.

Access:

All video sequences are available at HTTP and FTP.
Link: ftp://ftp-itec.uni-klu.ac.at/pub/datasets/mmsys12/
Link: http://www-itec.uni-klu.ac.at/ftp/datasets/mmsys12/

Contacts:

Information for the database may be obtained by contacting
Christian Timmerer (christian.timmerer@itec.uni-klu.ac.at)

References:

[LMT12] Lederer, S., Müller, C., Timmerer, C. Dynamic Adaptive Streaming over HTTP Dataset, In Proceedings of the ACM Multimedia Systems Conference 2012, Chapel Hill, North Carolina, February 22-24, 2012.

Qualinet partner: YES

2.2.18 Distributed DASH Dataset

Link: http://www-itec.uni-klu.ac.at/dash/?page_id=958

Description:

D-DASH is a dataset of content for the Dynamic Adaptive Streaming over HTTP (DASH) standard from MPEG. It is mirrored over different sites at different locations to perform, e.g., CDN-based scientific evaluations. The delivery of multimedia content over HTTP and on top of existing Internet infrastructures is becoming the preferred method within heterogeneous environment. The basic design principle is having an intelligent client which selects given and applicable media representations by issuing HTTP requests for individual segments based on the users' context and current conditions. Typically, this client behavior differs between implementations of the same kind and for the objective evaluations thereof appropriate datasets are needed. This paper presents a distributed dataset for the recently published MPEG-DASH standard which is mirrored at different sites across Europe, namely Klagenfurt, Paris, and Prague. A client implementation may choose to request segments from these sites and dynamically switch to a different location, e.g., in case the one currently used causes any issues. Hence, this distributed DASH dataset can be used for real-world evaluations enabling the simulation of switching between different content delivery networks. Finally, it is also offers a registration service for additional sites to join and, thus, expand the distribution of the dataset even further.

Access:

All video sequences are available at HTTP and FTP.
Link: http://www-itec.aau.at/ftp/datasets/mmsys13/

Contacts:

Information for the database may be obtained by contacting
Christian Timmerer (christian.timmerer@itec.uni-klu.ac.at)

References:

[LMT12] Lederer, S., Müller, C., Timmerer, C. Distributed DASH Dataset, In Proceedings of the ACM Multimedia Systems Conference 2013, Oslo, Norway, February 27 - March 1, 2013.

Qualinet partner: YES

2.2.19 DASH SVC Dataset

Link: http://www-itec.uni-klu.ac.at/dash/?page_id=207

Description:

The SVC video is encoded at one baselayer with ~0,3 Mbps at 320×180, enhancement layer one with ~0,95 Mbps at 640×360 and enhancement layer two with ~2,7 Mbps at 1280×720. The segments are available as bitstream without container. Furthermore, the SSIM values are provided for each layer. Special thanks to Christian Sieber from University Würzburg for providing this content (sieber@informatik.uni-wuerzburg.de)!

Access:

All video sequences are available at HTTP and FTP.
Link: http://www-itec.uni-klu.ac.at/ftp/datasets/mmsys12/TearsOfSteel

Citation:

If you use our data for your own publications please do not forget to reference the website and our paper [SHZ13].

Contacts:

Information for the database may be obtained by contacting
Christian Timmerer (christian.timmerer@itec.uni-klu.ac.at)
Stefan Lederer (stefan.lederer@itec.uni-klu.ac.at)

References:

[SHZ13] Christian Sieber, Tobias Hoßfeld, Thomas Zinner, Phuoc Tran-Gia, Christian Timmerer, "Implementation and User-centric Comparison of a Novel Adaptation Logic for DASH with SVC," In Proceedings of the IFIP/IEEE International Workshop on Quality of Experience Centric Management (QCMan), Ghent, Belgium, May 2013.

Qualinet partner: YES

2.2.20 DASH Streaming Performance using Neubot

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

This data set provides data, which collected by a DASH module built on top of Neubot, an open source tool for the collection of network measurements. A novel framework is used to evaluate the performance of rate-adaptation algorithms for DASH streaming using network measurements collected from more than a thousand Internet clients. Data, which have been made publicly available, are collected by a DASH module built on top of Neubot, an open source tool for the collection of network measurements. Some examples about the possible usage of the collected data are given, ranging from simple analysis and performance comparisons of download speeds to the performance simulation of alternative adaptation strategies using, e.g., the instantaneous available bandwidth values.

Access:

The files are available for download via HTTP.

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
The files are available in one archive (700MB) for download via HTTP:
Link: http://skuld.cs.umass.edu/traces/mmsys/2014/user02.tar

Contacts:

Information for the database may be obtained by contacting
Simone Basso (simone.basso@polito.it).

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [BSM14] at the MMSys conference (Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore).

References:

[BSM14] S. Basso, A. Servetti, E. Masala, J. C. De Martin, Measuring DASH streaming performance from the end users perspective using neubot, Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore.

Qualinet partner: NO

2.2.21 UQ_VIDEO dataset

Link: http://itee.uq.edu.au/~shenht/UQ_VIDEO/

Description:

The most popular 400 queries to query the videos from YouTube were chosen. Those queries are selected from Google Zeitgeist. Each year, Google examines billions of queries that people around the world have typed into Google search to discover the Zeitgeist saved in Google Zeitgeist Archives. Google Zeitgeist Archives from 2004 to 2009 were collected, and the most popular 400 queries were chosen to search YouTube. The downloaded number of videos for each query is up to 1000. More than 200K YouTube videos were crawled from July 2010 to September 2010. After filtering out the videos with sizes greater than 10M, the Combined Dataset contains 169,952 videos in total. Moreover 3,305,525 keyframes from these videos were extracted. This dataset is released to public so that other researchers will be able to use it as a test bed.

Access:

The size of the entire dataset is approx. 2.8GB and it is available for download in one archive.
Link: http://dropbox.eait.uq.edu.au/uqhshen/uq_video/

Contacts:

Information for the database may be obtained by contacting
Prof. Heng Tao Shen (shenht@itee.uq.edu.au)

Citation:

Please, cite the following paper in your reference if you use this database for your work [SYH11].

References:

[SYH11] Jingkuan Song, Yi Yang, Zi Huang, Heng Tao Shen, Richang Hong: Multiple feature hashing for real-time large scale near-duplicate video retrieval. ACM Multimedia, pages 423-432, 2011.

Qualinet partner: NO

2.2.22 PEViD: Privacy Evaluation Video Dataset

Link: http://mmspg.epfl.ch/page-58275.html

Description:

PEViD is a video dataset for objective and subjective evaluations of different types of privacy protection tools. The dataset consists of 20 video sequences (16 seconds each) of full HD resolution covering different video surveillance scenarios: walking, fighting, stealing, and dropping bag, in outdoor and indoor environments, as well as during day and night conditions. Most of the scenes are captured by two Canon HD cameras simultaneously from different angles to provide a clearer view of people in video sequences. All the participant are of various gender, race, dressed differently, and carrying various personal accessories. They have also read and signed the consent form, allowing free usage of these video sequences for research purposes. The dataset was annotated using Open Source ViPER-GT annotation tool with primary (face and body silhouette) and secondary (personal items and features, such as hair, skin regions, accessories, etc.) privacy sensitive regions. Additional personal information, such as gender, race, hair color, etc., was also recorded in annotation files, which are stored in XML format and can be easily processed in an automatic way.

Access:

PEViD dataset is publicly available for research. We are still in the process of making the dataset available online for everyone to download. But until then, the interested parties can contact Pavel Korshunov (pavel.korshunov@epfl.ch) directly and will be provided with the access instructions.

Contacts:

Information for the database may be obtained by contacting
Pavel Korshunov (pavel.korshunov@epfl.ch)
Touradj Ebrahimi (touradj.ebrahimi@epfl.ch)

Citation:

If you use this Dataset in your work, please, cite the following paper in the references: [KE2013]

References:

[KE2013] Pavel Korshunov and Touradj Ebrahimi, PEViD: Privacy Evaluation Video Dataset, in proceedings of proc. SPIE Applications of Digital Image Processing XXXVI, volume 8856, 2013.

Qualinet partner: YES

2.2.23 PEViD-HD: Privacy Evaluation Video Dataset

Link: http://mmspg.epfl.ch/pevid-hd

Description:

The dataset consists of 21 video clips (16 seconds each, full HD, 25 fps) and associated annotations in xml format of privacy-sensitive regions. Video clips show people performing various actions in indoor and outdoor environments during day and night times. The people shown in the videos are of different gender and ethnicity. Video clips are in MPEG-2 format, 16 seconds each, with a resolution of full HD resolution (1920x1080 pixels) at 25 frames per second. They were recorded using Canon HD HG21 camera and converted to MPEG-2 format with ffmpeg. There are 21 video clips in total. Several typical indoor and outdoor video surveillance scenarios were considered: simple walking (1 participant), stealing (2 participants),

dropping a bag (1 participant) fighting (2 participants). Several scenes were recorded for each scenario from two different angles by two cameras. Most of the participants in dataset recording were students from EPFL campus. Video clips show the variety of gender, race, and different personal accessories that people carry or wear.

Access:

You can download all video files and associated XML-based annotations from the following FTP (please use dedicated FTP clients, such as FileZilla or FireFTP):
FTP address: tremplin.epfl.ch
User name: PEViD@grebvm2.epfl.ch
Password: m@l>A_@$1(G?Z+;C
The total size of the dataset is about 825 MB.

Contacts:

In case of any problems or questions, please send an email to Pavel Korshunov (pavel.korshunov@epfl.ch).

Citation:

You can use PEViD dataset in your research without any conditions, as long as you clearly mention and acknowledge the following paper [KE13].

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References:

[KE13] P. Korshunov and T. Ebrahimi, PEViD: privacy evaluation video dataset, In SPIE Applications of Digital Image Processing XXXVI, volume 8856, San Diego, California, USA, Aug. 2013.

Qualinet partner: YES

2.2.24 PEViD-UHD: Privacy Evaluation Ultra High Definition Video Dataset

Link: http://mmspg.epfl.ch/pevid-uhd

Description:

To understand the implications of using UHD video in video surveillance, a dataset suitable for privacy evaluation is necessary. Existing public UHD datasets are mostly designed for evaluation of video compression and do not carry privacy sensitive information. And datasets dedicated to the evaluation of privacy issues, such as PEViD-HD (mmspg.epfl.ch/pevid-hd), contain at most HD video sequences. The dataset consists of 26 4K UHD video sequences, each 13 seconds long, with a frame resolution of 3840 x 2160 pixels and captured at 30 fps using a Samsung Galaxy Note 3 smartphone. Resized sequences in HD (1920 x 1080 pixels) and SD (720 x 404 pixels) are also provided together with the original 4K UHD sequenes. Video sequences in the dataset depict several typical surveillance scenarios: walking, exchanging bags, fighting, and stealing, which were shot in outdoor and indoor environments. Participants

appearing in the video have various gender and race, they are dressed differently and carry various personal items and accessories. Their silhouettes were manually annotated and the annotations are provided in XML format. All participants have read and signed a consent form, allowing free usage of these video sequences for research purposes.

Access:

You can download all video files, associated XML-based annotations, and the raw data of the subjective experiments from the following FTP (please use dedicated FTP clients, such as FileZilla or FireFTP):
Coming soon!

Contacts:

In case of any problems or questions, please send an email to Pavel Korshunov (pavel.korshunov@epfl.ch).

Citation:

You can use PEViD-UHD dataset in your research without any conditions, as long as you clearly mention and acknowledge the following paper [KE14].

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References:

[KE14] P. Korshunov, and T. Ebrahimi. UHD Video Dataset for Evaluation of Privacy. Sixth International Workshop on Quality of Multimedia Experience (QoMEX 2014), Singapore, 2014.

Qualinet partner: YES

2.2.25 SJTU 4K Video Sequence Dataset

Link: http://medialab.sjtu.edu.cn/web4k/index.html

Description:

This dataset contains 15 new 4K resolution ultra-high definition (UHD) video sequences (3840x2160) for catering the requirement of active UHD video quality assessment algorithms in coming years, as well as help to fully evaluate coding efficiency of latest HEVC (High Efficient Video Coding).

Access:

The size of all 15 sequences (3840x2160) is about 270GB, with both YUV 4:4:4 color sampling, 10 bits per sample and YUV 4:2:0 color sampling, 8 bits per sample formats. 10bit raw video file can be played by pyuv. Due to the huge amount of data, please be patient to download. All sequences can be downloaded from public server through the following link:
Link: http://medialab.sjtu.edu.cn/web4k/index.html

Contacts:

Institute of Image Communication & Information Processing, Shanghai Jiao Tong University, China:
Li Song (song_li@sjtu.edu.cn)

Citation:

This dataset is available for free and academic research only, no commercial use. Please cite the paper [STZ13] in any published work if you use those video sequences.

References:

[STZ13] L. Song, X. Tang, W. Zhang, X. Yang, P. Xia, The SJTU 4K Video Sequence Dataset, the Fifth International Workshop on Quality of Multimedia Experience (QoMEX2013), Klagenfurt, Austria, July 3rd-5th, 2013.

Qualinet partner: NO

2.2.26 Video Surveillance Online Repository (ViSOR)

Link: http://imagelab.ing.unimore.it/visor/

Description:

An open platform for collecting, annotating, and sharing surveillance videos. Most of the included videos are annotated, based on a reference ontology which integrates hundreds of concepts, some of them coming from the LSCOM and MediaMill ontologies. The ViSOR (Video Surveillance Online Repository) is a framework, designed with the aim of establishing an open platform for collecting, annotating, retrieving, and sharing surveillance videos, as well as evaluating the performance of automatic surveillance systems. Annotations are based on a reference ontology which has been defined integrating hundreds of concepts, some of them coming from the LSCOM and MediaMill ontologies. A new annotation classification schema is also provided, which is aimed at identifying the spatial, temporal and domain detail level used. The ViSOR web interface allows video browsing, querying by annotated concepts or by keywords, compressed video previewing, media downloading and uploading. Finally, ViSOR includes a performance evaluation desk which can be used to compare different annotations.

Access:

ViSOR contains two datasets for people reidentification:
3DPeS (3D People Surveillance Dataset) is a new surveillance dataset, designed mainly for people re-identification:
Link: http://imagelab.ing.unimore.it/visor/3dpes.asp
SARC3D is a dataset for people reidentification in video:
Link: http://imagelab.ing.unimore.it/visor/sarc3d.asp

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [VC13] at the MMSys conference (Proceedings of ACM MMSys 13, February 27 - March 1, 2013, Oslo, Norway).

References:

[VC13] Roberto Vezzani, Rita Cucchiara, Video Surveillance Online Repository (ViSOR): an integrated framework, Proceedings of the 4th ACM Multimedia Systems Conferen (MMSys), Oslo, Norway, USA, February 27 - March 1, 2013.

Qualinet partner: NO

2.2.27 Blip10000: A social Video Dataset containing SPUG Content for Tagging and Retrieval

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

The increasing amount of digital multimedia content available is inspiring potential new types of user interaction with video data. Users want to easily find the content by searching and browsing. For this reason, techniques are needed that allow automatic categorisation, searching the content and linking to related information. The presented dataset contains comprehensive semi-professional user-generated (SPUG) content, including audiovisual content, user-contributed metadata, automatic speech recognition transcripts, automatic shot boundary files, and social information for multiple 'social levels'. The principal characteristics of this dataset are described and results are presented that have been achieved on different tasks.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
Direct link to the files:
Link: http://skuld.cs.umass.edu/traces/mmsys/2013/blip/Blip10000.html

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [SXF13] at the MMSys conference (Proceedings of ACM MMSys 13, February 27 - March 1, 2013, Oslo, Norway).

References:

[SXF13] S. Schmiedeke, P. Xu, I. Ferrané, M. Eskevich, C. Kofler, M. Larson, Y. Estève, L. Lamel, G. Jones, T. Sikora, Blip10000: a social video dataset containing SPUG content for tagging and retrieval, Proceedings of the 4th ACM Multimedia Systems Conferen (MMSys), Oslo, Norway, USA, February 27 - March 1, 2013.

Qualinet partner: NO

2.2.28 Jiku Mobile Video Dataset

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

Proliferation of mobile devices with video recording capability has lead to a tremendous growth in the amount of user-generated mobile videos. Researchers have embarked on developing new interesting applications and enhancement algorithms for mobile video. There is, however, no standard dataset with videos that could represent characteristics of mobile videos captured in realistic scenarios. The presented dataset consists of videos simultaneously recorded using mobile devices in an unconstrained manner by multiple users attending performance events. Each video is accompanied by concurrent readings from accelerometer and compass sensors. At the time of writing, the dataset contains 473 video clips, with a total length of 30 hours 41 minutes and total size of 122.8 GB. This dataset is useful as a common benchmark dataset for a variety of different research topics on mobile videos, including video analytics, video quality enhancement, and automatic video mashups.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
Full dataset download script:
Link: http://skuld.cs.umass.edu/traces/mmsys/2013/jiku/jiku-downloader.tar.gz
Selective video download page:
Link: http://liubei.ddns.comp.nus.edu.sg/jiku/dataset/download/

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [SVO13] at the MMSys conference (Proceedings of ACM MMSys 13, February 27 - March 1, 2013, Oslo, Norway).

References:

[SVO13] Mukesh Saini, Seshadri Padmanabha Venkatagiri, Wei Tsang Ooi, Mun Choon Chan, The jiku mobile video dataset, Proceedings of the 4th ACM Multimedia Systems Conferen (MMSys), Oslo, Norway, USA, February 27 - March 1, 2013.

Qualinet partner: NO

2.2.29 Consumer video dataset with marked head trajectories

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

Content-based test video corpora usually builds on top of professional material or controlled settings. However, recent years have shown strong increase in user-generated content on the web. The increase in content volume creates challenges in accessibility and utility of the video content. In order to improve the utility of the user-generated videos, better automation for content-based descriptions are needed. Proper test sets are required to develop robust methods for content analysis. Detecting people from video is a common feature that is often seen in both in science and in commercial services. Unfortunately there is a lack of test data for person tracking from consumer videos. A novel video dataset accommodates this shortage. The dataset is done with two consumer-priced devices: a handheld camcorder and a mobile phone. Both devices were used to store material in indoor and outdoor settings with different attention levels from the people being filmed. The dataset comes with ground truth data that includes person head trajectories and other people marked in the background in MPEG-7-based metadata model. Description is given of this metadata model and an annotation tool used for creating the ground truth data is published. Experimental results are provided as a benchmark for all those who would like to use the dataset.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
Direct link to the files:
Link: http://skuld.cs.umass.edu/traces/mmsys/2013/markedhead/

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [SRH13] at the MMSys conference (Proceedings of ACM MMSys 13, February 27 - March 1, 2013, Oslo, Norway).

References:

[SRH13] Jouni Sarvanko, Mika Rautiainen, Arto Heikkinen, Mika Ylianttila, Consumer video dataset with marked head trajectories, Proceedings of the 4th ACM Multimedia Systems Conferen (MMSys), Oslo, Norway, USA, February 27 - March 1, 2013.

Qualinet partner: NO

2.2.30 ARRI Raw Color Sequence Dataset

Link: ftp://ftp.arri.de/

Description:

The dataset contains high-resolution color image sequences captured with a professional digital cinema camera in raw format.

Access:

The content is available via FTP:
Link: ftp://ftp.arri.de/

Copyright notice:

Contacts:

For further information or request please contact:
Dr. Stefano Andriani
Sr. Image Science Engineer @ ARRI
email: sandriani@arri.de

References:

[ABS13] Andriani, S.; Brendel, H.; Seybold, T.; Goldstone, J., Beyond the Kodak image set: A new reference set of color image sequences,Image Processing (ICIP), 2013 20th IEEE International Conference on , vol., no., pp.2289,2293, 15-18 Sept. 2013
doi: 10.1109/ICIP.2013.6738472.

Qualinet partner: NO

2.2.31 EBU MIM-SCAIE Content Set for Automatic Information Extraction on Broadcast Media

Link: http://ebu-scaie.lab.vrt.be/mammie

Description:

Content set that has been made available by the European Broadcasting Union (EBU). The content in the set consists of broadcast media content collected from different broadcasters around the world. This content set is made available to the research community in order to evaluate automatic information extraction tools on this broadcast media. The set also contains ground truth data and annotations for several automatic information extraction tasks.

Access:

The files are available for download via HTTP after registration.
Link: http://ebu-scaie.lab.vrt.be/mammie/

Contacts:

Information for the database may be obtained by contacting

Mike Matton (mike.matton@vrt.be).

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [MMB14] at the MMSys conference (Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore).

References:

[MMB14] M. Matton, A. Messina, W. Bailer, J.-P. Évain, The EBU MIM-SCAIE content set for automatic information extraction on broadcast media, Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore.

Qualinet partner: NO

2.2.32 Soccer Video and Player Position Dataset

Link: http://home.ifi.uio.no/paalh/dataset/alfheim/

Description:

Dataset of elite soccer player movements and corresponding videos. The dataset is captured at Alfheim Stadium -- the home arena for Tromsø IL (Norway). The player postions are measured at 20 Hz using the ZXY Sport Tracking system, and the video is captured from the middle of the field using two camera arrays. The player tracking system provides the player coordinates on the field, their speed, acceleration and force together with an ID and timestamp. The camera array covers the entire field, and each camera can be used individually or as a stitched panorama video. In addition to the obvious sport analytics scenario, the dataset can be used several ways. In the multimedia scenario, the combination of sensor data and video gives a researcher a video dataset with a ground truth object position from the sensor data, i.e., it can be used to test algorithms used for feature extraction, object tracking, background substraction, etc. The sensor data itself can also be used alone in simulations or experiments where for example the users with devices move on a limited area (the field) with a varying speed and direction.

Access:

The files are available for download via HTTP.
Link: http://home.ifi.uio.no/paalh/dataset/alfheim/

Contacts:

Information for the database may be obtained by contacting
Svein Arne Pettersen (svein.arne.pettersen@uit.no).

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [PJJ14] at the MMSys conference (Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore).

References:

[PJJ14] S. A. Pettersen, D. Johansen, H. Johansen, V. Berg-Johansen, V. R. Gaddam, A. Mortensen, R. Langseth, C. Griwodz, H. K. Stensland, and P. Halvorsen, Soccer video and player position dataset, Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore.

Qualinet partner: NO

2.2.33 YawDD: A Yawning Detection Dataset

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

Two video datasets of drivers with various facial characteristics, to be used for designing and testing algorithms and models for yawning detection. For collecting these videos, male and female candidates were asked to sit in the driver's seat of a car. The videos are taken in real and varying illumination conditions. In the first dataset, the camera is installed under the front mirror of the car. Each participant has three or four videos and each video contains different mouth conditions such as normal, talking/singing, and yawning. In the second dataset, the camera is installed on the dash in front of the driver, and each participant has one video with the above-mentioned different mouth conditions all in the same video. The car was parked for both datasets to keep the environment safe for the participants. As a benchmark, we also present the results of our own yawning detection method, and show that we can achieve a much higher accuracy in the scenario with the camera installed on the dash in front of the driver.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
The files are available in one archive (4.9GB) for download via HTTP:
Link: http://skuld.cs.umass.edu/traces/mmsys/2014/user06.tar

Contacts:

Information for the database may be obtained by contacting
Shabnam Abtahi (sabtahi@discover.uottawa.ca).

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [AOS14] at the MMSys conference (Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore).

References:

[AOS14] S. Abtahi, M. Omidyeganeh, S. Shirmohammadi, B. Hariri, YawDD: a yawning detection dataset, Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore.

Qualinet partner: NO

2.2.34 Stanford I2V: A News Video Dataset for Query-by-Image Experiments

Link: http://blackhole1.stanford.edu/vidsearch/dataset/stanfordi2v.html

Description:

Reproducible research in the area of visual search depends on the availability of large annotated datasets. In this paper, we address the problem of querying a video database by images that might share some contents with one or more video clips. We present a new large dataset, called Stanford I2V. We have collected more than 3,800 hours of newscast videos and annotated more than 200 ground-truth queries. In the following, the dataset is described in detail, the collection methodology is outlined and retrieval performance for a benchmark algorithm is presented. These results may serve as a baseline for future research and provide an example of the intended use of the Stanford I2V dataset.

Access:

The files are available for download via HTTP.
Link: https://purl.stanford.edu/zx935qw7203

Contacts:

André Filgueiras de Araujo (afaraujo@stanford.edu)

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [ACC15] at the MMSys conference (Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015).

References:

[ACC15] A. Araujo, J. Chaves, D. Chen, R. Angst and B. Girod. Stanford I2V: A News Video Dataset for Query-by-Image Experiments, Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015.

Qualinet partner: NO

2.2.35 Multi-sensor Concert Recording Dataset Including Professional and User-generated Content

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

We present a novel dataset for multi-view video and spatial audio. An ensemble of ten musicians from the BBC Philharmonic Orchestra performed in the orchestra's rehearsal studio in Salford, UK, on 25th March 2014. This presented a controlled environment in which to capture a dataset that could be used to simulate a large event, whilst allowing control over the conditions and performance. The dataset consists of hundreds of video and audio clips captured during 18 takes of performances, using a broad range of professional- and consumer-grade equipment, up to 4K video and high-end spatial microphones. In addition to the audiovisual essence, sensor metadata has been captured, and ground truth annotations, in particular for temporal synchronization and spatial alignment, have been created. A part of the dataset has also been prepared for adaptive content streaming. The dataset is released under a Creative Commons Attribution Non-Commercial Share Alike license and hosted on a specifically adapted content management platform.

Access:

The files are available for download via HTTP.
Link: http://icosole.eu/

Contacts:

Werner Bailer (werner.bailer@joanneum.at)

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [BPB15] at the MMSys conference (Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015).

References:

[BPB15] W. Bailer, C. Pike, R. Bauwens, R. Grandl, M. Matton, M. Thaler. Multi-sensor Concert Recording Dataset Including Professional and User-generated Content, Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015.

Qualinet partner: NO

2.3 3D Visual Content Databases

2.3.1 LIVE 3D Image Quality Database - Phase I

Link: http://live.ece.utexas.edu/research/quality/live_3dimage_phase1.html

Description:

The 3D IQA database consists of 20 reference images and 365 distorted images (80 each for JP2K, JPEG, WN and FF; 45 for Blur) with co-registered human scores in the form of DMOS. All distortions are symmetric in nature. Apart from human opinion scores for every distorted image, the database also provides researchers access with `true' depth and disparity information of every reference image obtained from a range scanner, which all of the above databases lack. The image and range data used in this study were collected using an advanced terrestrial range scanner, the RIEGL VZ-400, with a co-registered 12.1 megapixel Nikon D700 digital camera mounted on top of it.

Citation:

The following papers [MSM12] are to be cited in the bibliography whenever the database is used.

Access:

Database can be downloaded using the link:
http://live.ece.utexas.edu/research/quality/LIVE3DIQD_phase1.rar
Please fill the form and the password will be sent to you:
https://docs.google.com/spreadsheet/viewform?formkey=dE1sY3lpZUlsSVR0NmxRYjdIM0FydWc6MQ

Copyright notice:

Link: http://live.ece.utexas.edu/research/quality/live_3dimage_phase1.html
Permission is hereby granted, without written agreement and without license or royalty fees, to use, copy, modify, and distribute this database (the images, the results and the source files) and its documentation for any purpose, provided that the copyright notice in its entirety appear in all copies of this database, and the original source of this database, Laboratory for Image and Video Engineering (LIVE, http://live.ece.utexas.edu) and Center for Perceptual Systems (CPS, http://www.cps.utexas.edu) at the University of Texas at Austin (UT Austin, http://www.utexas.edu), is acknowledged in any publication that reports research using this database.

Contacts:

Dr. Anush Krishna Moorthy (anushmoorthy@gmail.com) - Graduated from UT Austin in 2012
Che-Chun Su (chechunsu@mail.utexas.edu) - Graduate student at UT Austin
Anish Mittal (mittal.anish@gmail.com) - Graduate student at UT Austin
Dr. Alan C. Bovik (bovik@ece.utexas.edu) - Professor, Dept. of ECE, UT Austin

References:

[MSM12] Moorthy, A. K., Su, C.-C., Mittal, A. and Bovik, A.C. “Subjective evaluation of stereoscopic image quality,” Signal Processing: Image Communication, to appear, 2012.

Qualinet partner: NO

2.3.2 3D4YOU - Content Generation and Delivery for 3D Television

Link: The website of the project (www.3d4you.eu) is no longer available.

Description:

The 3D4YOU project will develop the key elements of a practical 3D television system, particularly, the definition of a 3D delivery format and guidelines for a 3D content creation process.The "Beer Garden" 3D test sequence is available, which is one of the 3D sequences that have been produced within the 3D4YOU project. This sequence has also been submitted to MPEG in response to its call for 3D content.

Access:

The Beer Garden Content is available after registering. The website of the project (www.3d4you.eu) is no longer available. The record has been kept for future reference.

Copyright notice:

The supplied data is provided free of charge and made available for use by the Licensee, under the following conditions:
The Licensee agrees that the data and all intellectual property rights therein remain the property of the 3D4YOU partners (Philips, BBC, HHI, Thomson, FT, CAU, KUK). The respective owners make no warranties with respect to the data and expressly disclaim any warranties regarding its fitness for any purpose. The Licensee may present the results of its technical research and development through public demonstration at exhibitions and conferences provided that the 3D4YOU project is credited as the source of the data. The Licensee may present the results of its technical research and development in print, on the World Wide Web or other electronic form provided that the 3D4YOU project is credited as the source of the data. The Licensee agrees not to provide the data to any third parties without permission from the 3D4YOU partners and that the data shall not be sold, let for hire, or by way of trade, offered or exposed for sale or hire. This restriction shall apply to the original material or to any reproduction of it in whole or in part.

Qualinet partner: NO

2.3.3 Reference stereoscopic image repository database

Link: http://20203dmedia.eu/repo.html

Description:

This repository of stereoscopic sequences is available for research and development purposes. This is an initiative of the 3D Media Cluster. There are 7 sequences (1920x1080) available (Beach2, Audrey-long, Beach_horses, Kiss, Audrey_Effect, Fitou_french, BarParis).

Access:

Link: http://20203dmedia.eu/repo.html

Copyright notice:

Availability is public but non compressed sequences and without identifier are upon request (info@20203dmedia.eu).

Qualinet partner: NO

2.3.4 3DTV Network of Excellence - Public Software and Data Repository

Link: The website of the project (http://www.3dtv-research.org) is no longer available. The record has been kept for future reference.

Description:

The repository contains number of publicly available stereoscopic sequences.

Access:

The website of the project (http://www.3dtv-research.org) is no longer available. The record has been kept for future reference. Test sequences included in "JVT-U211.doc, Common Test Conditions for Multiview Video Coding" available from Fraunhofer-Institut für Nachrichtentechnik, Heinrich-Hertz-Institut (HHI).
Link: http://sp.cs.tut.fi/mobile3dtv/stereo-video/

Contacts:

Aljoscha Smolic (smolic@hhi.de)

Qualinet partner: NO

2.3.5 Mitsubishi Electric Research Laboratories (MERL) MVC Test Sequences

Link: ftp://ftp.merl.com/pub/avetro/

Description:

The repository contains test sequences included in "JVT-U211.doc, Common Test Conditions for Multiview Video Coding" available MERL.

Access:

Test sequences included in "JVT-U211.doc, Common Test Conditions for Multiview Video Coding" available from MERL:
Link: ftp://ftp.merl.com/pub/avetro/

Contacts:

Anthony Vetro (avetro@merl.com)

Qualinet partner: NO

2.3.6 PUT MVC Test Sequences (CfP on 3D Video Coding (3DVC))

Link: http://new.owieczka.net/en/2013/01/21/poznan-3d-video-test-sequences-with-depth-maps/

Description:

The repository contains multiview vide test sequences from Poznan University of Technology included in "w12036, Call for Proposals (CfP) on 3D Video Coding (3DVC)" by ISO/IEC JTC1/SC29/WG11.

Access:

Test sequences included in "w12036, Call for Proposals (CfP) on 3D Video Coding (3DVC)" are available at:
Link: ftp://multimedia.edu.pl/3DV/
username: 3DV / password: ftvftv
directory: CFP
Additional link at the database owner website:

Link: http://new.owieczka.net/en/2013/01/21/poznan-3d-video-test-sequences-with-depth-maps/

Copyright notice:

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Citation:

Acknowledgement and reference to the following source document: Marek Domañski, Tomasz Grajek, Krzysztof Klimaszewski, Maciej Kurc, Olgierd Stankiewicz, Jakub Stankowski, Krzysztof Wegner "Poznañ Multiview Video Test Sequences and Camera Parameters", ISO/IEC JTC1/SC29/WG11 MPEG 2009/M17050, Xian, China, October 2009, are required in all documents that report any usage of the materials.

References:

[DGK09] Marek Domañski, Tomasz Grajek, Krzysztof Klimaszewski, Maciej Kurc, Olgierd Stankiewicz, Jakub Stankowski, Krzysztof Wegner "Poznañ Multiview Video Test Sequences and Camera Parameters", ISO/IEC JTC1/SC29/WG11 MPEG 2009/M17050, Xian, China, October 2009.

Qualinet partner: NO

2.3.7 Nagoya MVC Test Sequences (CfP on 3D Video Coding (3DVC))

Link: http://www.tanimoto.nuee.nagoya-u.ac.jp/MPEG-FTVProject.html

Description:

The repository contains multiview vide test sequences from Tanimoto Lab at Nagoya University included in “w12036, Call for Proposals (CfP) on 3D Video Coding (3DVC)” by ISO/IEC JTC1/SC29/WG11.

Access:

Web site for Nagoya MVC Test Sequences (CfP on 3D Video Coding (3DVC)) included in “w12036, Call for Proposals (CfP) on 3D Video Coding (3DVC)” is no longer available. The record has been kept for future reference. Other similar video sequences can be found at:
Link: http://www.tanimoto.nuee.nagoya-u.ac.jp/MPEG-FTVProject.html

Copyright notice:

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Qualinet partner: NO

2.3.8 GIST MVC Test Sequences (CfP on 3D Video Coding (3DVC))

Link: http://sp.cs.tut.fi/mobile3dtv/stereo-video/

Description:

The repository contains multiview vide test sequences from Gwangju Institute of Science and Technology (GIST) included in "w12036, Call for Proposals (CfP) on 3D Video Coding (3DVC)" by ISO/IEC JTC1/SC29/WG11.

Access:

Test sequences included in "w12036, Call for Proposals (CfP) on 3D Video Coding (3DVC)" are available at:
Link: http://sp.cs.tut.fi/mobile3dtv/stereo-video/

Copyright notice:

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Owners: Gwangju Institute of Science and Technology (GIST), 1 Oryong-dong, Buk-gu, Gwangju, 500-712, Republic of Korea.

Qualinet partner: NO

2.3.9 ETRI MVC Test Sequences (CfP on 3D Video Coding (3DVC))

Link: http://sp.cs.tut.fi/mobile3dtv/stereo-video/

Description:

The repository contains multiview vide test sequences from Electronics and Telecommunications Research Institute (ETRI) included in "w12036, Call for Proposals (CfP) on 3D Video Coding (3DVC)" by ISO/IEC JTC1/SC29/WG11.

Access:

Test sequences included in "w12036, Call for Proposals (CfP) on 3D Video Coding (3DVC)" are available at:
Link: http://sp.cs.tut.fi/mobile3dtv/stereo-video/

Copyright notice:

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Owners: Gwangju Institute of Science and Technology (GIST), 1 Oryong-dong, Buk-gu, Gwangju, 500-712, Republic of Korea.

Qualinet partner: NO

2.3.10 NOKIA MVC Test Sequences (CfP on 3D Video Coding (3DVC))

Link: The FTP site (ftp://mpeg3dv.research.nokia.com) is no longer available.

Description:

The repository contains multiview vide test sequences from NOKIA included in "w12036, Call for Proposals (CfP) on 3D Video Coding (3DVC)" by ISO/IEC JTC1/SC29/WG11.

Access:

FTP site for NOKIA MVC Test Sequences (CfP on 3D Video Coding (3DVC)) included in "w12036, Call for Proposals (CfP) on 3D Video Coding (3DVC)" is no longer available. The record has been kept for future reference. Other similar video sequences can be found at:
Link: http://sp.cs.tut.fi/mobile3dtv/stereo-video/

Copyright notice:

Copyright: The supplied data and content ("Supplied Data") is provided free of charge and made available for use by the Licensee, who shall be a member of the MPEG standardization committee or a respondent to a the Call for Proposals for the MPEG standard for 3D video coding that is to be issued March 2011, under the following conditions: The Licensee agrees that the Supplied Data and all intellectual property rights therein remain the property of Nokia Corporation and its licensors (owners). The Supplied Data may only be used for the purpose of responding to the Call for Proposals that is to be issued March 2011, developing, testing and promulgating the MPEG technology standard for 3D video coding resulting from the Call for Proposals that is to be issued March 2011. The respective owners make no warranties with respect to the Supplied Data and expressly disclaim any warranties regarding its fitness for any purpose. As a way of promulgating the MPEG technology standard for 3D video coding, the Licensee may present parts or modifications of the Supplied Data at academic conferences and publications. The Licensee agrees not to provide the data to any third parties without permission from the owners and that the data shall not be sold, let for hire, or by way of trade, offered or exposed for sale or hire. This restriction shall apply to the original material or to any reproduction of it in whole or in part and to any modifications of the Supplied Data. The texture views of the Supplied Data are copyright © UNDO. (See http://www.undo.fi)

Qualinet partner: NO

2.3.11 Middlebury Stereo Datasets

Link: http://vision.middlebury.edu/stereo/

Description:

The repository contains four groups of stereo datasets. Each stereo dataset is usually with the full-size views and disparity maps.

Access:

Link: http://vision.middlebury.edu/stereo/data/

Citation:

We grant permission to use and publish all images and disparity maps on this website. However, if you use our datasets, we request that you cite the appropriate paper(s): [SS02] for the 2001 datasets, [SS03] for the 2003 datasets, and [SP07] or [HS07] for the 2005 and 2006 datasets.

References:

[SS02] D. Scharstein and R. Szeliski. A taxonomy and evaluation of dense two-frame stereo correspondence algorithms. International Journal of Computer Vision, 47(1/2/3):7-42, April-June 2002.
[SS03] D. Scharstein and R. Szeliski. High-accuracy stereo depth maps using structured light.

In IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR 2003), volume 1, pages 195-202, Madison, WI, June 2003.
[SP07] D. Scharstein and C. Pal. Learning conditional random fields for stereo. In IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR 2007), Minneapolis, MN, June 2007.
[HS07] H. Hirschmüller and D. Scharstein. Evaluation of cost functions for stereo matching. In IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR 2007), Minneapolis, MN, June 2007.

Qualinet partner: NO

2.3.12 Mobile 3DTV content delivery optimization over DVB-H system

Link: http://sp.cs.tut.fi/mobile3dtv/stereo-video/

Description:

Availability of suitable test data is a crucial condition for research and development in video processing and coding. In order to lay the fundaments for further research and development in the project, a data base of stereo video was created. In total 28 stereo and multiview sequences are available to the project, which is an extremely rich data set. Half of the material is available with full copyright. The available data are listed and illustrated here. Main characteristics of the content in terms of motion, colour, texture, light, indoor/outdoor, depth, etc. are provided.

Access:

The page mainly lists available stereo-video content. The FhG-HHI data can be downloaded from an FTP server.
Link: ftp.hhi.de
Dir: HHIMPEG3DV
User: mpeg3dv
Password: Cah#K9xu

Datasets from other suppliers are upon request:
Electronics and Telecommunications Research Institute (ETRI) http://www.etri.re.kr/
Nagoya University - Tanimoto Laboratory http://www.tanimoto.nuee.nagoya-u.ac.jp/mpeg/mpeg_ftv.html
Gwangju Institute of Science and Technology (GIST) http://vclab.gist.ac.kr/index.html
Poznan University of Technology http://www2.put.poznan.pl/en
University of West Bohemia http://www.zcu.cz/en/
Red Star Studio Ltd http://www.redstarstudio.co.uk/
Werner Bloos http://www.wbloos.de/

References:

[3DTV] http://sp.cs.tut.fi/mobile3dtv/results/
[3DTVb] Aljoscha Smolic, Gerhard Tech and Heribert Brust, Technical report D2.1, July 2010, Modelling of the stereoscopic HVS, http://sp.cs.tut.fi/mobile3dtv/results/tech/D5.3_Mobile3DTV_v2.0.pdf
[3DTVc] Atanas Boev, Maija Poikela, Atanas Gotchev, and Anil Aksay, Technical report D5.3, July 2010, Report on generation of stereo video data base, http://sp.cs.tut.fi/mobile3dtv/results/tech/D2.1_Mobile3DTV_v3.0.pdf

Qualinet partner: NO

2.3.13 Free Viewpoint TV – MPEG FTV Project at Tanimoto Laboratory

Link: http://www.tanimoto.nuee.nagoya-u.ac.jp/MPEG-FTVProject.html

Description:

The repository contains various FTV test sequences.

Copyright notice:

FTV test sequences can be downloaded and used for academic purposes following the conditions below. In your publication using the FTV test sequences, please mention that these sequences are downloaded from [1] under the permission of Tanimoto Lab at Nagoya University and list the download link in the reference ([1] http://www.tanimoto.nuee.nagoya-u.ac.jp/).

Access:

The FTV test sequences download is password protected (www-admin@tanimoto.nuee.nagoya-u.ac.jp).
Link: http://www.tanimoto.nuee.nagoya-u.ac.jp/mpeg/mpeg_ftv.html

Qualinet partner: NO

2.3.14 Biomedical databases for 3D image quality assessment

Link: http://ftp.optica.csic.es/page58/page58.html

Description:

Two databases to foster the collaboration with other EU projects are presented. The first one corresponds to 3D Electron Microscopy volumes. Two distinct data sets are provided: one noiseless and another one with noise. Inside each dataset there are several volumes with and without digital filtering. This dataset is related with the INSTRUCT project (Integrated Structural Biology Infraestructure (FP7-211252)). The second database is related with a recently approved COST project on bimodal PET-MRI molecular imaging (TD1007). The data set consists of different reconstruction algorithms with a without noise.

Contacts:

Information for the database may be obtained by contacting Gabriel Cristobal (gabriel@optica.csic.es).

Qualinet partner: YES

2.3.15 IRCCyN/IVC 3D images dataset

Link: http://www.irccyn.ec-nantes.fr/spip.php?article876

Description:

This database contains 96 stereoscopic images and their associated subjective scores. Six different stereoscopic images are considered in this database which is composed of the six reference images (undistorted) and fifteen distorted version of each sources generated from three different processings (JPEG, JPEG2000, blurring) symmetrically to the stereopair images. A spreedshit "Details_images_with_DMOS" gives the distortion applicated, the degradation level and the Difference Mean Opinion Score (DMOS) associated for each stereoscopic paires. For more precise explanation on the degradation applied, please read the degradation section The result of this database could be used to design new metrics for 3D quality assessment.

Access:

Still images at FTP:
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/IRCCyN_IVC_Quality_Assessment_Of_Stereoscopic_Images/

Qualinet Databases Mirror:
Link:
ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_Quality_Assessment_Of_Stereoscopic_Images
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [BLC08].

References:

[BLC08] Alexandre Benoit, Patrick Le Callet, Patrizio Campisi, Romain Cousseau, "Quality Assessment of Stereoscopic Images", EURASIP Journal on Image and Video Processing, 2008.

Qualinet partner: YES

2.3.16 IRCCyN/IVC NAMA3DS1 - COSPAD1

Link: http://www.irccyn.ec-nantes.fr/spip.php?article1052

Description:

This 3D video quality database contains 110 3D stereoscopic videos sequences and the associated subjective results. 10 different video source contents were used that originate from the NAMA3DS1 database. For each content, the reference (without degradation) and 10 different degradations called Hypothetical Reference Circuits (HRCs) were subjectively evaluated in an ITU conforming environment. The HRCs are based on H.264 and JPEG2000 coding and typical image proccessing steps like downsampling and image sharpening. A description of the SRC and the HRC is provided in the description file added to the description of the viewing and environmental condition in which the videos were evaluated. Absolute Category Rating - Hidden Reference (ACR-HR) was used as test methodology. Please note that the type of degradations added to the sequences are mainly impacting on the image (video) quality scale and therefore this experiment should not be used to evaluate 3D subjective scales such as visual comfort, depth quality or immersion as the degradations have not been introduced particularly for these scales and the results would be strongly biased.

Copyright notice:

Access:

A spreadsheet with the individual scores and the Mean Opinion Score (MOS) for each of the 110 Processed Video Sequences (PVS) is provided:
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/NAMA3DS1_COSPAD1/NAMA3DS1-CoSpaD1_MOS.xlsx
The PVS (avi videos) are available on FTP server:

Link: ftp://ftp.ivc.polytech.univ-nantes.fr/NAMA3DS1_COSPAD1/Avi_videos
Preview images are provided for getting an impression on the content seen by the observers during the subjective experiment:
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/NAMA3DS1_COSPAD1/preview

Qualinet Databases Mirror:
Link: ftpes://multimediatech.cz/IRCCyN_IVC/IRCCyN_IVC_NAMA3DS1_COSPAD1
Username: dbq-mirrors
Password: kucykepe

Citation:

Please, cite the following paper in your reference if you use this database for your work [UGB12].

References:

[UGB12] Matthieu Urvoy, Jesús Gutiérrez, Marcus Barkowsky, RomainCousseau, Yao Koudota, Vincent Ricordel, Patrick Le Callet and Narciso García, "NAMA3DS1-COSPAD1 : Subjective video quality assessment database on coding conditions introducing freely available high quality 3D stereoscopic sequences", Fourth International on Quality of Multimedia Experience, Yarra Valley, July 2012.

Qualinet partner: YES

2.3.17 NTNU/NMH Stereoscopic 3D Quality Datasets

Link: http://www.iet-multimedialabs.org/3d_quality/

Description:

Quality assessment on emerging stereoscopic 3D media is still in an early stage when compared to 2D image/video quality assessment. New characteristics (e.g. specific artifact perception, visual strain, perceived depth) and various requisite factors in stereoscopic systems (e.g. system-introduced crosstalk, screen size, viewing position, scene content, camera baseline) should be taken into account. However, most subjective quality assessments on stereoscopic 3D have been focused on coding artifacts and their influence on the perceived viewing experience. Thus, demand on sharing datasets on perceived visual quality under various requisite factors of stereoscopic systems is increasing. Therefore, we publish three visual quality datasets, including crosstalk stereoscopic (relates crosstalk perception to scene content, crosstalk level and camera baseline), crosstalk auto-stereoscopic (relates crosstalk perception to scene content, crosstalk level and viewing position) and QoE stereoscopic (relates QoE to scene content, camera baseline, screen size and viewing position).

Access:

Crosstalk stereoscopic, Crosstalk auto-stereoscopic and QoE stereoscopic subjective data and video sequences are available at:
Link: http://www.iet-multimedialabs.org/3d_quality/

Citation:

Please, cite the following paper in your reference if you use this database for your work [XYE13].

Contacts:

Liyuan Xing (liyuan.xing@ntnu.no)

References:

[XYE13] Liyuan Xing, Junyong You, Touradj Ebrahimi, and Andrew Perkis, STEREOSCOPIC QUALITY DATASETS UNDER VARIOUS TEST CONDITIONS, Fifth International on Quality of Multimedia Experience, Klagenfurt am Wörthersee, Austria, July 2013.

Qualinet partner: YES

2.3.18 RMIT uncompressed stereoscopic 3D HD video library

Link: http://www.rmit3dv.com/

Description:

RMIT3DV is a library of uncompressed stereoscopic 3D HD video, designed to represent a diverse range of content and visual conditions to enable its use in a variety of (research) applications. Currently composed of 31 sequences, shots were designed taking into consideration: level of 3D effect, aesthetic composition, variations in colour, environment (e.g., natural/urban), motion (e.g., traffic/pedestrian/natural), texture (e.g., water, natural greenery, buildings, people, transport), and light (e.g., day/night, natural/artificial, light reflections/shadows). The sequences were all filmed at various indoor and outdoor locations around RMIT University (City Campus) and the Melbourne CBD region. The database was natively filmed on a Panasonic AG-3DA1 HD 3D camera using Blackmagic Hyperdeck Shuttles and Intel SATA3 SSDs (formatted as HFS+) to record the uncompressed video content. Sequences are 1920 x 1080 HD resolution, 10-bit 4:2:2 YUV at 25 fps (no audio content - yet!) More technical details about the camera rigging, pre-production, stereography, filming and post-production processes and workflows are available here. Funded by the Smart Services CRC, RMIT3DV is part of a research collaboration between a team of researchers led by Prof. Ian Burnett (School of Electrical and Computer Engineering, RMIT University) and Alex Joseski and Jonathan Burton (Alex and Jono Films) in Melbourne, Australia. For optimal 3D viewing results, it is recommended that the content be viewed on a 25.5 inch (or 65cm) 3D-capable monitor, where the ideal position of the viewer's eye-level is in line with the vertical and horizontal centre of the screen.

Copyright notice:

The database is freely available online via the Creative Commons Attribution-ShareAlike License. This license allows users to utilise the database for commercial and non-commercial purposes, where the content and authors must be credited. Researchers are encouraged to contribute 3D content to grow the resource for the 3D video research community, however, all new content must also carry this same license. (http://creativecommons.org/licenses/by-sa/3.0/deed.en_GB)

Access:

The files are available for download via HTTP. The uncompressed video files are stored in MOV video containers. The MP4 file is provided for previewing purposes if you require flexible 3D output formats:
Link: ftp://ftp.ivc.polytech.univ-nantes.fr/NAMA3DS1_COSPAD1/NAMA3DS1-CoSpaD1_MOS.xlsx
The PVS (avi videos) are available on FTP server:
Link: http://www.rmit3dv.com/download.php

Citation:

If you use this database, please reference this website and the following publication where appropriate [CBB12].

References:

[CBB12] E. Cheng, P. Burton, J. Burton, A. Joseski, I. Burnett, "RMIT3DV: Pre-Announcement of a Creative Commons Uncompressed HD 3D Video Database," in Proc. 4th International Workshop on Quality of Multimedia Experience (QoMEX 2012), Yarra Valley, Australia, 5-7 July 2012.

Qualinet partner: YES

2.3.19 IVP Anaglyph Image Database

Link: http://www.ee.cuhk.edu.hk/~snli/anaglyph_database.htm

Description:

Subjective tests have been conducted, involving 25 stereo image pairs and 20 subjects, to compare the overall performance of 4 anaglyph generation methods. 5 images are selected in another experiment to evaluate the image quality regarding specific distortions, e.g., chrominance accuracy, retinal rivalry, and ghosting effect.

Access:

The MATLAB code of the proposed anaglyph image generation algorithm can be downloaded here:
Link: http://www.ee.cuhk.edu.hk/~snli/MATLAB_code.zip
All the other experimental data, including the original stereo image pairs, anaglyph images generated by the 4 different methods and their subjective quality ratings, can be downloaded here:
Link: http://ivp.ee.cuhk.edu.hk/research/database/anaglyph/Experimental_data.zip

Citation:

Please, cite the following paper in your reference if you use this database for your work [LMN13].

References:

[LMN13] Songnan Li, Lin Ma, King Ngi Ngan, Anaglyph Image Generation by Matching Color Appearance Attributes, Preprint submitted to Elsevier, March 2013.

Qualinet partner: NO

2.3.20 MMSPG Multi-view database

Link: http://mmspg.epfl.ch/MultiviewDatabase

Description:

One of the alternative methods to display 3D content on the conventional 2D screen is based on the monocular cue called motion parallax. One of the ways how to employ motion parallax based method is to use multi-view image or video content and then to display relevant view for each position of viewer face. In general, there is not sufficient amount of multi-view image data available due to the difficult multi-view acquisition proces which needs specific hardware and software solution. We came up with the solution to render multi-view content using open source software called Blender (http://www.blender.org/). The biggest advantage of this software is the availability of production repository and the posibility to use scripting in order to automate required tasks. So, the python scripts which allows the user to generate set of cameras in different setup (1D parallel, circular, grid) and render the scene from Blender with each of them has been developed and are available.

Access:

Python scripts to automaticaly generate the multi-view content from Blender are available from HTTP:
Script using Add-On in Blender
Link: https://documents.epfl.ch/groups/g/gr/gr-eb-unit/public/multiview-generation-add-on.zip
Scripts using command line
Link: https://documents.epfl.ch/groups/g/gr/gr-eb-unit/public/multiview-generation-command-line.zip
Manual how to use scripts
Link: https://documents.epfl.ch/groups/g/gr/gr-eb-unit/public/User-Manual.pdf
Link to ftp server with multi-view database (under construction...)
In order to obtain the password to access ftp server please contact Martin Rerabek (martin.rerabek@epfl.ch).

Citation:

If you use this database or scripts to generate the multi-view content in your research we kindly ask you to reference the website (http://mmspg.epfl.ch/MultiviewDatabase).

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Contacts:

If you have any questions regarding this research please contact Martin Rerabek (martin.rerabek@epfl.ch).

Qualinet partner: YES

2.3.21 INTERFERE I

Link: http://www.erc-interfere.eu/downloads.html#INTERFERE-I

Description:

Holography allows for both the recording and reproduction of wavefields of light, and is thereby able to fully capture the three-dimensional structure of objects. Because holograms represent interference patterns, they possess significantly different signal properties from natural photography and video, causing conventional image encoders perform sub-optimally on holograms. Therefore, new data compression techniques have to be evaluated for this type of data. One important requirement for comparing and evaluating various codecs is to have reference holograms which are publicly available. For this purpose, we pioneered the setup of an open public data base containing a set of holograms. Here we release the first version of this open access public database of test holograms with varied content named INTERFERE I. The intent is to standardize experimental validations of holographic compression engines. We intend to extend the database with more types of holograms, coming from simulations or real holographic recording setups, as well as including contributions from others. In this release, the database contains 5 computer generated holograms created from 2D and 3D objects using an in-

house CGH algorithm capable of handling self-occlusion for 3D objects. further detail about the holograms can be found in the database webpage. The next version, will include more holograms as well as subjective ratings.

Access:

Link: http://www.erc-interfere.eu/downloads.html#INTERFERE-I

Citation:

If you use this Database, please cite this reference [BAS15].

Contacts:

Peter Schelkens (pschelke@etro.vub.ac.be)

References:

[BAS15], D.Blinder, A.Ahar, A.Symeonidou, Y.Xing, T.Bruylants, C.Schretter, B. Pesquet-Popescu, F. Dufaux, A. Munteanu, P.Schelkens, Open Access Database for Experimental Validations of Holographic Compression Engines, 7th International Workshop on Quality of Multimedia Experience (QoMEX), Costa Navarino, Greece, May 26-29, 2015.

Qualinet partner: YES

2.3.22 MMSPG EPFL Light-Field Image Dataset

Link: http://mmspg.epfl.ch/EPFL-light-field-image-dataset

Description:

Publicly available dataset of light-field images acquired with Lytro ILLUM camera. Detailed information about the data is available in the document at the following link: http://infoscience.epfl.ch/record/209930/files/PLENO-LF-Dataset-Proposal.pdf

Access:

All info to access the data is available at http://mmspg.epfl.ch/EPFL-light-field-image-dataset

Citation:

If you use this dataset in your research, we kindly ask you to reference the following paper [RYA15] and URL link of this website (http://mmspg.epfl.ch/EPFL-light-field-image-dataset).

Copyright notice:

Contacts:

If you have any questions regarding this research please contact Martin Rerabek (martin.rerabek@epfl.ch).

Qualinet partner: YES

2.3.23 Multi-Lens Stereoscopic Synthetic Video Dataset

Link: http://maserati.cs.pdx.edu/Dataset/

Description:

This dataset paper describes a synthetically-generated, multi-lens stereoscopic video dataset and associated 3D models. Creating a multi-lens video stream requires that the lens be placed at a spacing less than one inch. While such cameras can be built out of off-the-shelf parts, they are not "professional" enough to allow for necessary requirements such as zoom-lens control or synchronization between cameras. Other dedicated devices exist but do not have sufficient resolution per image. This dataset provides 20 synthetic models, each with an associated multi-lens walkthrough, and the uncompressed video from its generation. This dataset can be used for multi-view compression, multi-view streaming, view-interpolation, or other computer graphics related research.

Access:

The files are available for download via HTTP.
Link: http://maserati.cs.pdx.edu/Dataset/

Contacts:

Fan Zhang (zhangfan@pdx.edu)

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [ZFF15] at the MMSys conference (Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015).

References:

[ZFF15] Fan Zhang, Wu-chi Feng, and Feng Liu. A Multi-Lens Stereoscopic Synthetic Video Dataset, Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015.

Qualinet partner: NO

2.4 Other Multimedia Content Related Databases

2.4.1 Network Traces of Virtual Worlds: Measurements and Applications

Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2011/second-life/author.html

Description:

Although network traces of virtual worlds are valuable to ISPs (Internet service providers), virtual world software developers, and research communities, they do not exist in the public domain. In this work, we implement a complete testbed to efficiently collect and analyze network traces from a popular virtual world: Second Life. We use the testbed to gather traces from 100 regions with diverse characteristics. The network traces represent more than 60 hours of virtual world traffic and the trace files are created in a wellstructured and concise format. Our preliminary analysis on the collected traces is consistent with previous work in the literature. It also reveals some new insights: for example, local avatar/object density imposes clear implications on traffic patterns. The developed testbed and released trace files can be leveraged by research communities for various studies on virtual worlds. For example, accurate traffic models can be derived from our trace files, which in turn can guide developers for better virtual world designs.

Access:

The files are available for download via HTTP.
Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2011/second-life/download.html
First release of network traces collected from 100 Second Life regions. The tar file can be downloaded:
Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2011/second-life/traces.v1.tgz

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [WHS11] at the MMSys conference (MMSys 11, February 23-25, San Jose, California, USA, Copyright 2011 ACM 978-1-4503-0517-4/11/02).

References:

[WHS11] Y. Wang, C. Hsu, J. Singh, X Liu, Network Traces of Virtual Worlds: Measurements and Applications, Proceedings of the First ACM Multimedia Systems Conference (MMSys), San Jose, CA, USA, February 23-25, 2011.

Qualinet partner: NO

2.4.2 End-to-End and Network-Internal Measurements of Real-Time Traffic to Residential Users

Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2011/isp/author.html

Description:

Little performance data currently exists for streaming high-quality Internet video to residential users. Data on streaming performance provides valuable input to the design of new protocols and applications, for example when evaluating congestion control and error-correction schemes, and for sizing playout buffers in video receivers. This paper presents measurements of streaming real-time UDP traffic to a number of residential users, and discusses the basic characteristics of the data. The following datasets are referenced from the paper. They contain measurements of CBR RTP traffic, sent from a campus machine to receivers connected to the Internet via ADSL and Cable links. Dataset-A contains only end-to-end measurements, while Dataset-B also includes some end-to-middle measurements obtained using TTL-limited probes, and packet-pair measurements from which the path capacities can be estimated. Dataset-A was collected between June and October 2009, while Dataset-B was collected between April and September 2010.

Access:

The files are available for download via HTTP. The raw datasets contain the original trace files logged by our measurement tools, compressed using crtpdumpz, and traceroute output for each trace (with IP addresses and hostnames anonymised). The processed datasets contain end-to-end queueing delay time series (both dataset-A and dataset-B), and end-to-middle delay measurements and packet-pair capacity measurements (dataset-B only).
Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2011/isp/

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [EPP11] at the MMSys conference (MMSys 11, February 23-25, San Jose, California, USA, Copyright 2011 ACM 978-1-4503-0517-4/11/02).

References:

[EPP11] Martin Ellis, Colin Perkins, and Dimitrios Pezaros, End-to-End and Network-Internal Measurements on Real-Time Traffic to Residential Users, Proceedings of the First ACM Multimedia Systems Conference (MMSys), San Jose, CA, USA, February 23-25, 2011.

Qualinet partner: NO

2.4.3 World of Warcraft Avatar History Dataset

Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2011/wow/

Description:

From the perspective of game system designers, players' behavior is one of the most important factors they must consider when designing game systems. To gain a fundamental understanding of the game play behavior of online gamers, exploring users' game play time provides a good starting point. This is because the concept of game play time is applicable to all genres of games and it enables us to model the system workload as well as the impact of system and network QoS on users' behavior. It can even help us predict players' loyalty to specific games. The World of Warcraft Avatar History (WoWAH) dataset comprises the records of 91,065 avatars. The data includes the avatars' game play times and a number of attributes, such as their race, profession, current level, and in-game locations, during a 1,107-day period between Jan. 2006 and Jan. 2009.

Access:

The files are available for download via HTTP.
Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2011/wow/
Dataset can be downloaded in one file (RAR format, 577,334,422 bytes):
Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2011/wow/wowah.rar
The files are available also at the mirror site:
Link: http://mmnet.iis.sinica.edu.tw/dl/wowah/
Link: http://mmnet.iis.sinica.edu.tw/dl/wowah/wowah.rar

Contact:

If you have any question and/or comments regarding WOWAH, or if you want to list your publications on this page, please feel free to contact Kuan-Ta Chen at (swc@iis.sinica.edu.tw).

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [LCC11] at the MMSys conference (MMSys 11, February 23-25, San Jose, California, USA, Copyright 2011 ACM 978-1-4503-0517-4/11/02).

References:

[LCC11] Y. Lee, K. Chen, Y. Cheng, C. Lei, World of Warcraft Avatar History Dataset, Proceedings of the First ACM Multimedia Systems Conference (MMSys), San Jose, CA, USA, February 23-25, 2011.

Qualinet partner: NO

2.4.4 Nemezis Aimbot dataset

Link: http://www.aimbot-labs.com/datasets/nemezis.html

Description:

Collecting gameplay data related to matches in which there is the participation of cheaters for research purposes is not an easy task. First of all, it is not an easy task to gather and monitor

cheaters, since this kind of players are usually disguised and not willing to be marked as cheaters. A second concern is related to the way the data are acquired during the gameplay: there are not open systems able to collect realtime data from a match in an FPS and moreover is difficult to define which could be a meaningful set of features able to describe in a complete way the status of the game and of its players. In order to be able to analyze real data using machine learning techniques to distinguish between a legit player or a cheater, we have created a mutator in Unreal Tournament 3 able to collect the data previously described, and we have played several matches with our Nemezis Framework, which has performance comparable with the one provided by commercial grade cheating systems. The data collected during these experiments are being distributed as part of this dataset.

Access:

http://www.aimbot-labs.com/datasets/CIGDataset11.zip

Citation:

If you use this dataset, please cite the following paper [GLC11].

Copyright notice:

The authors of the research paper are the copyright holders of all the traces included in the dataset.

Contacts:

Information for the database may be obtained by contacting
Luca Galli (lgalli@elet.polimi.it)

References:

[GLC11] Galli, L. and Loiacono, D. and Cardamone, L. and Lanzi, P.L. "A cheating detection framework for Unreal Tournament III: A machine learning approach" IEEE Conference on Computational Intelligence and Games (CIG), August, 2011

Qualinet partner: YES

2.4.5 Affect Corpus 2.0: An Extension of a Corpus for Actor Level Emotion Magnitude Detection

Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2011/affect-corpus/

Description:

While previous research has shown that streaming media can respond to network congestion, it is not known to what extent commercial products are responsive. Knowledge of streaming media's response to congestion encountered in the network is important in building networks that better accommodate their turbulence. This research seeks to characterize the bitrate response of Windows Streaming Media (WSM) in response to network-level metrics such as capacity, loss rate, and round-trip time. We construct a streaming media test bed that allows us to systematically vary network and content encoding characteristics to measure WSM congestion responsiveness under various streaming configurations and network conditions. We find WSM has a prominent buffering phase in which it sends data at a bitrate significantly higher than the steady-state playout rate. Overall, WSM is responsive to available capacity, but is often unfair to TCP. The additional characteristics we measure can be combined to guide emulation or simulation configurations and network traffic generators for use in further research. The corpus includes new annotations for affect magnitude detection, anaphora resolution, and speech processing. The corpus includes new automatic annotations using Natural Language Processing toolkits as well as new manual annotations for affect magnitude detection.

Access:

The files are available for download via HTTP.
Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2011/affect-corpus/
Dataset can be downloaded in one ZIP file:
Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2011/affect-corpus/MMSysAffectCorpus2.zip
Dataset mirror is available:
http://nlp.lsu.edu/corpus/MMSysAffectCorpus2.zip
Matching mp3 audio files for 119 of the stories (1 GB in total) can be downloaded from:
Link: http://nlp.lsu.edu/corpus/mp3

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [CK11] at the MMSys conference (MMSys 11, February 23-25, San Jose, California, USA, Copyright 2011 ACM 978-1-4503-0517-4/11/02).

References:

[CK11] R. Calix, G. Knapp, Affect Corpus 2.0: An Extension of a Corpus for Actor Level Emotion Magnitude Detection, Proceedings of the First ACM Multimedia Systems Conference (MMSys), San Jose, CA, USA, February 23-25, 2011.

Qualinet partner: NO

2.4.6 6DMG: A New 6D Motion Gesture Database

Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2012/6dmg/

Description:

Motion-based control is gaining popularity, and motion gestures form a complementary modality in human-computer interactions. To achieve more robust userindependent motion gesture recognition in a manner analogous to automatic speech recognition, we need a deeper understanding of the motions in gesture, which arouses the need for a 6D motion gesture database. Presented database contains comprehensive motion data, including the position, orientation, acceleration, and angular speed, for a set of common motion gestures performed by different users. This motion gesture database can be a useful platform for researchers and developers to build their recognition algorithms as well as a common test bench for performance comparisons.

Access:

The files are available for download via HTTP.
Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2012/6dmg/
Dataset can be downloaded in one ZIP file:
Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2012/6dmg/MotionGesture_042511.rar
Dataset mirror is available:
http://www.ece.gatech.edu/6DMG/6DMG.html

Contacts:

Any questions, requests, and feedbacks should be sent to:
Mingyu Chen (mingyu@gatech.edu)

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [CAJ12] at the MMSys conference (MMSys 12, February 22-24, Chapel Hill, North Carolina, USA, Copyright 2012 ACM 978-1-4503-1131-1/12/02).

References:

[CAJ12] M. Chen, G. AlRegib, B. Juang, 6DMG: A New 6D Motion Gesture Database, Proceedings of the Second ACM Multimedia Systems Conference (MMSys), Chapel Hill, NC, USA, February 22-24, 2012.

Qualinet partner: NO

2.4.7 Network Traffic from Anarchy Online: Analysis, Statistics and Applications

Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2012/anarchy/

Description:

Presented dataset (a real-world, server-side packet trace) is from Anarchy Online. Anarchy Online is a science fiction-themed massively multiplayer online roleplaying game (MMORPG), published and developed by Funcom. Statistics from the network traffic are presented and it is shown that it is a representative dataset for similar games. From the dataset, one can extract several key characteristics from such scenarios like payload sizes, packet rates, data delivery latencies, retransmission statistics, loss rates and stream correlation. The dataset can be used several ways: by replaying the game traffic, components like congestion control mechanisms, middlewares, packet schedulers, router queue behaviour, etc. can be analysed. Based on the observed statistics from the trace, such interactive game traffic shows completely different behaviour compared to the greedy, high-rate streams most network mechanisms are designed for, e.g., file download, video streaming and web-surfing. The dataset can be used to push research forward in the field of system support for games.

Access:

The files are available for download via HTTP.
Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2012/anarchy/
Dataset can be downloaded in one PCAP file:
Link: http://web.cs.wpi.edu/~claypool/mmsys-dataset/2012/anarchy/anarchy-online-server-side-packet-trace-1hr.pcap

Contacts:

Any questions, requests, and feedbacks should be sent to:
Andreas Petlund (apetlund@ifi.uio.no)

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [PHH12] at the MMSys conference (MMSys 12, February 22-24, Chapel Hill, North Carolina, USA, Copyright 2012 ACM 978-1-4503-1131-1/12/02).

References:

[PHH12] A. Petlund, P. Halvorsen, P. Hansen, T. Lindgren, R. Casais, C. Griwodz, Network Traffic from Anarchy Online: Analysis, Statistics and Applications, Proceedings of the Second ACM Multimedia Systems Conference (MMSys), Chapel Hill, NC, USA, February 22-24, 2012.

Qualinet partner: NO

2.4.8 Multimodal Data Set on Popular Music

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

MusiClef data set is a multimodal data set of professionally annotated music. It includes editorial metadata about songs, albums, and artists, as well as MusicBrainz identifiers to facilitate linking to other data sets. In addition, several state-of-the-art audio features are provided. Different sets of annotations and music context data - collaboratively generated user tags, web pages about artists and albums, and the annotation labels provided by music experts - are included too. Versions of this data set were used in the MusiClef evaluation campaigns in 2011 and 2012 for auto-tagging tasks. The complete data set is publicly available for download at http://www.cp.jku.at/musiclef. The data set contains multimodal data on 1355 popular music songs by 218 leading artists, and is a considerably expanded version of the data set that was used for the MusiClef Multimodal Music Tagging Task at MediaEval 2012.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
Direct link to the files:
Link: http://skuld.cs.umass.edu/traces/mmsys/2013/multimodalmusic/
Mirrored site:
http://www.cp.jku.at/musiclef

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [SOL13] at the MMSys conference (Proceedings of ACM MMSys 13, February 27 - March 1, 2013, Oslo, Norway).

References:

[SOL13] Markus Schedl, Nicola Orio, Cynthia C. S. Liem, Geoffroy Peeters, A Professionally Annotated and Enriched Multimodal Data Set on Popular Music, Proceedings of the 4th ACM Multimedia Systems Conferen (MMSys), Oslo, Norway, USA, February 27 - March 1, 2013.

Qualinet partner: NO

2.4.9 Commute Path Bandwidth Traces from 3G Networks

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

In this dataset we present and make available real-world measurements of the throughput that was achieved at the application layer when adaptive HTTP streaming was performed over 3G networks using mobile devices. For the streaming sessions, popular commute routes were used in and around Oslo (Norway) traveling with different types of public transportation (metro, tram, train, bus and ferry). Few logs are available using a car. Each log provides a times-tamp, GPS coordinates and the measured number of bytes downloaded for approximately every second of the route. The dataset can be used in several ways, but the most obvious application is to emulate the same network bandwidth behavior (on specific geographical positions) for repeated experiments.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
Direct link to the files:
Link: http://skuld.cs.umass.edu/traces/mmsys/2013/pathbandwidth/

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [RVG13] at the MMSys conference (Proceedings of ACM MMSys 13, February 27 - March 1, 2013, Oslo, Norway).

References:

[RVG13] Haakon Riiser, Paul Vigmostad, Carsten Griwodz, Pål Halvorsen, Commute path bandwidth traces from 3G networks: analysis and applications, Proceedings of the 4th ACM Multimedia Systems Conferen (MMSys), Oslo, Norway, USA, February 27 - March 1, 2013.

Qualinet partner: NO

2.4.10 SopCast P2P Live Streaming Traces

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

P2P-TV applications have attracted a lot of attention from the research community in the last years. Such systems generate a large amount of data which impacts the network performance. As a natural consequence, characterizing these systems has become a very important task to develop better multimedia systems. However, crawling data from P2P live streaming systems is particularly challenging by the fact that most of these applications have private protocols. This database contains a set of logs from a very popular P2P live streaming application, the SopCast. The logs and the characterization can be used as a starting point to the development of new live streaming systems.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
Direct link to the files:
Link: http://skuld.cs.umass.edu/traces/mmsys/2013/sopcast/

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [VSH13] at the MMSys conference (Proceedings of ACM MMSys 13, February 27 - March 1, 2013, Oslo, Norway).

References:

[VSH13] Alex Borges Vieira, Ana Paula Couto da Silva, Francisco Henrique, Glauber Goncalves, Pedro de Carvalho Gomes, SopCast P2P live streaming: live session traces and analysis, Proceedings of the 4th ACM Multimedia Systems Conferen (MMSys), Oslo, Norway, USA, February 27 - March 1, 2013.

Qualinet partner: NO

2.4.11 Monitoring Mobile Video Delivery to Android Devices

Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys

Description:

The proliferation of smart devices for mobile networks is a major traffic generator nowadays. These devices provide the ability to receive media content in nearly every situation. Despite that video streaming in high quality is getting more and more popular in mobile scenarios, the performance and bottlenecks of mobile applications over wireless networks, especially, during the transmission of media streams, are poorly understood yet. In order to tackle this new challenge, we present an Android based framework to capture the relevant wireless network behavior, geo-coordinates and packet traces for popular streaming applications on Android certified devices. A dataset has been obtained by measurement trials, which have been performed in a 3G network for both HTTP and peer-to-peer video streaming applications. The trials comprise also an additional WiFi measurement for comparison purposes. The presented dataset enables future research to determine the quality of service and network characteristics of different streaming methodologies, which are affected by the typical conditions encountered in wireless networks, like hand-over effects, signal fading, connection losses etc. The presented dataset and the framework, may prove to be useful for the traffic measurement and the multimedia research communities.

Access:

The files are available for download via HTTP.
Link: http://traces.cs.umass.edu/index.php/Mmsys/Mmsys
Direct link to the files:
Link: http://skuld.cs.umass.edu/traces/mmsys/2013/androidvideo/

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the paper [EHG13] at the MMSys conference (Proceedings of ACM MMSys 13, February 27 - March 1, 2013, Oslo, Norway).

References:

[EHG13] Philipp M. Eittenberger, Michael Hamatschek, Marcel Großmann, Udo R. Krieger, Monitoring mobile video delivery to Android devices, Proceedings of the 4th ACM Multimedia Systems Conferen (MMSys), Oslo, Norway, USA, February 27 - March 1, 2013.

Qualinet partner: NO

2.4.12 RECOLA

Link: http://diuf.unifr.ch/diva/recola/

Description:

The RECOLA database includes 9.5 hours of multimodal recordings of spontaneous collaborative and affective interactions in French. Multimodal data, i.e., audio, video, ECG and EDA, were continuously and synchronously recorded from 46 participants, who were completing in dyads and by video conference a task requiring collaboration. Mood of participants were manipulated to balance the context of interaction: a team was always composed of a neutral teammate and either a positive or a negative teammate. In addition to these recordings, we provide both emotion and social labels from internal and external views, i.e., from participants via self-reports and from 6 French-speaking assistants via the ANNEMO web-based annotation tool, respectively, for the first 5 minutes of all recorded sequences. The RECOLA database may be of great interest to all research groups working on the automated analysis of spontaneous socio-emotional behaviors, emotion contagion as well as interpersonal synchrony from multimodal cues, i.e., speech behavior, facial expressions and physiological data.

Access:

The RECOLA Database is available for research purpose. Please print, fill, sign and send the End User Licence Agreement (EULA) to the indicated email address. Details on the download process are available at:
Link: http://diuf.unifr.ch/diva/recola/

Contact:

Fabien Ringeval and Denis Lalanne (diuf-recola@unifr.ch)

Citation:

Please, cite the following in your reference if you use this database for your work [RSS13].

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DIVA, Université de Fribourg-Universität Freiburg, and the contributors to this work disclaim all warranties with regard to the ANNEMO software and the RECOLA database, including all implied warranties of merchantability and fitness. In no event shall DIVA, Université de Fribourg-Universität Freiburg nor the contributors be liable for any special, indirect or consequential damages or any damages whatsoever resulting from loss of use, data or profits, whether in an action of contract, negligence or other tortious action, arising out of or in connection with the use or performance of the ANNEMO software and the RECOLA database.

References:

[RSS13] F. Ringeval, A. Sonderegger, J. Sauer and D. Lalanne, Introducing the RECOLA Multimodal Corpus of Remote Collaborative and Affective Interactions, 2nd International Workshop on Emotion Representation, Analysis and Synthesis in Continuous Time and Space (EmoSPACE), in proc. of IEEE Face & Gestures 2013, Shanghai (China), April 22-26 2013.

Qualinet partner: NO

2.4.13 Web Browsing QoE Subjective Test Dataset V 1.0

Link: http://userver.ftw.at/qoe/web-dataset/

Description:

The data is based on a subjective lab experiment in which participants (N=32) had to browse four different websites at different network speeds resulting in different levels of experienced responsiveness. The websites were different in terms of technical complexity (number of objects, etc.) and genre (encyclopedia, cooking community, news portal, travel portal). For the web browsing test conditions, test subjects experienced different maximum network downlink bandwidth settings (32-1024 kbit/s). In each condition, a browser session with the corresponding website was initiated and users asked to perform a certain browsing scenario on a Windows notebook. After each condition, subjects were asked to rate their overall quality experience (on a 9-point ACR scale) as well as other aspects like overall acceptability. This test methodology conforms with ITU-T Rec. P.1501.

Access:

By downloading the test content from the download link I accept the terms of the copyright and licensing conditions stated below.
http://userver.ftw.at/qoe/web-dataset/download.php?Down=web_qoe_dataset_v10.zip

Citation:

The use of this dataset in any kind of work (project, publication, etc.) must be attributed as [SE14].

Copyright notice:

Web Browsing QoE Test Dataset V 1.0 is licensed under Creative Commons (http://creativecommons.org/licenses/by-nc-sa/3.0/at/deed.en).

References:

[SE14] R. Schatz and S. Egger, An Annotated Dataset for Web Browsing QoE. In: 6th International Workshop on Quality of Multimedia Experience (QoMEX), September 18-20, Singapore, 2014.

Qualinet partner: YES

2.4.14 ITU-T Test Signals for Telecommunication Systems

Link: http://www.itu.int/net/itu-t/sigdb/menu.aspx

Description:

Many ITU-T Recommendations contain test signals intended to test end-to-end quality of telecommunications systems and to assess implementations conformity to specific Recommendation provisions. These test data cover the different types of media: audio, still images and moving images. ITU-T test signals are a highly valuable collection of more than 20 GB size that constitute a worldwide reference for assessing the different components of telecommunications systems. In order to facilitate their use, ITU-T test signals were grouped into a single database.

Access:

The list of ITU-T Recommendations that contain freely available test signals for download. Each link opens a webpage with a short description of the relevant content and a link to download the relevant test signals:
http://www.itu.int/net/itu-t/sigdb/menu.aspx

Copyright notice:

The signals constitute part of the corresponding ITU-T Recommendations and are protected by copyrights laws.

Qualinet partner: NO

2.4.15 MMSPG OPPD: Odor Pleasantness Perception Database

Link: http://mmspg.epfl.ch/page-108296-en.html

Description:

The EEG datasets (in MATLAB format) that were used to produce the results in the paper EEG Correlates of Pleasant and Unpleasant Odor Perception. The dataset consists of 5 subjects. The necessary explanatory files are included in the folder. The files published here allow to reproduce the results in the aforementioned paper, but can also be used as a basis for your own research on odor pleasantness perception from EEG signals. Should you use the datasets for your own publications please do not forget to cite our paper.

Access:

You can download all files and associated subjective ratings. Instructions for download can be obtained at (http://mmspg.epfl.ch/page-108296-en.html) and from Eleni Kroupi (eleni.kroupi@epfl.ch).

Citation:

You can use the OPPD dataset in your research without any conditions, as long as you clearly mention and acknowledge the following paper [KSE14].

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Contacts:

Eleni Kroupi (eleni.kroupi@epfl.ch)

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[KSE14] E. Kroupi, D. Sopic and T. Ebrahimi. Non-Linear EEG Features for Odor Pleasantness Recognition. 6th International Workshop on Quality of Multimedia Experience, Singapore, 2014.

Qualinet partner: YES

2.4.16 LaRED: A Large RGB-D Extensible Hand Gesture Dataset

Link: http://mclab.citi.sinica.edu.tw/dataset/lared/lared.html

Description:

The LaRED is recorded with the Intel's short range depth camera (the model number: VF0780-SDK-CE). In particular, the LaRED dataset contains 27 gestures in 3 different orientations, which makes a total of 81 classes. We have 10 subjects performing the corresponding hand gesture and 300 images are collected from each subject with the Intel camera providing a pair of synchornized color and depth images. Meanwhile, a mask image is given to localize the boundary of the gesture-performing hand.

Access:

Data and code available in archives:
Link: http://mclab.citi.sinica.edu.tw/dataset/lared/lared.html

Contacts:

Information for the database may be obtained by contacting
Jordi Sanchez-Riera (jsan3386@citi.sinica.edu.tw).

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [HSL14] at the MMSys conference (Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore).

References:

[HSL14] Yuan-Sheng Hsiao, Jordi Sanchez-Riera, Tekoing Lim, Kai-Lung Hua, Wen-Huang Cheng, LaRED: a large RGB-D extensible hand gesture dataset, Proceedings of ACM MMSys 2014, March 19 - March 21, 2014, Singapore, Singapore.

Qualinet partner: NO

2.4.17 YouTube Live and Twitch: A Tour of User-Generated Live Streaming Systems

Link: http://dash.ipv6.enstb.fr/dataset/live-sessions/

Description:

User-Generated live video streaming systems are services that allow anybody to broadcast a video stream over the Internet. These Over-The-Top services have recently gained popularity, in particular with e-sport, and can now be seen as competitors of the traditional cable TV. In this paper, we present a dataset for further works on these systems. This dataset contains data on the two main user-generated live streaming systems: Twitch and the live service of YouTube. We got three months of traces of these services from January to April 2014. Our dataset includes, at every five minutes, the identifier of the online broadcaster, the number of people watching the stream, and various other media information. In this paper, we introduce the dataset and we make a preliminary study to show the size of the dataset and its potentials. We first show that both systems generate a significant traffic with frequent peaks at more than 1 Tbps. Thanks to more than a million unique uploaders, Twitch is in particular able to offer a rich service at anytime. Our second main observation is that the popularity of these channels is more heterogeneous than what have been observed in other services gathering user-generated content.

Access:

The files are available for download via HTTP.
Link: http://dash.ipv6.enstb.fr/dataset/live-sessions/

Contacts:

Karine Pires (karine.pires@telecom-bretagne.eu)

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [PS15] at the MMSys conference (Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015).

References:

[PS15] K. Pires, G. Simon. YouTube Live and Twitch: A Tour of User-Generated Live Streaming Systems, Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015.

Qualinet partner: NO

2.4.18 Data Set of Fall Events and Daily Activities from Inertial Sensors

Link: http://skuld.cs.umass.edu/traces/mmsys/2015/paper-15/

Description:

Wearable sensors are becoming popular for remote health monitoring as technology improves and cost reduces. One area in which wearable sensors are increasingly being used is falls monitoring. The elderly, in particular are vulnerable to falls and require continuous monitoring. Indeed, many attempts, with insufficient success have been made towards accurate, robust and generic falls and Activities of Daily Living (ADL) classification. A major challenge in developing solutions for fall detection is access to sufficiently large data set. This paper presents a description of the data set and the experimental protocols designed by the authors for the simulation of falls, near-falls and ADL. Forty-two volunteers were recruited to participate in an experiment that involved a set of scripted protocols. Four types of falls (forward, backward,

lateral left and right) and several ADL were simulated. This data set is intended for the evaluation of fall detection algorithms by combining daily activities and transitions from one posture to another with falls. In our prior work, machine learning based fall detection algorithms were developed and evaluated. Results showed that our algorithm was able to discriminate between falls and ADL with an F-measure of 94%.

Access:

The files are available for download via HTTP.
Link: http://skuld.cs.umass.edu/traces/mmsys/2015/paper-15/

Contacts:

Olukunle Ojetola (olukunle.ojetola@coventry.ac.uk)

Citation:

Use of the datasets in published work should be acknowledged by a full citation to the authors' papers [OGB15] at the MMSys conference (Proceedings of ACM MMSys '15, Portland, Oregon, March 18-20, 2015).

References:

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Qualinet partner: NO

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