

## Publications, Dr. Ralph Ewerth

### Doctoral Thesis (Dissertation)

- 1 R. Ewerth:  
*Robust Video Content Analysis via Transductive Learning Methods*  
Dissertation. University of Marburg, Germany, 2008.  
Südwestdeutscher Verlag für Hochschulschriften, Stuttgart, ISBN: 978-3-8381-0120-0

### International Journals (peer-reviewed)

- 2 R. Ewerth, M. Mühling, B. Freisleben:  
*Robust Video Content Analysis via Transductive Learning*  
In: ACM Transactions on Intelligent Systems and Technology, accepted for publication,  
<http://tist.acm.org/papers.html>
- 3 M. Schwalb, R. Ewerth, B. Freisleben:  
*Fast Motion Estimation on Graphics Hardware for H.264 Video Encoding*  
In: IEEE Transactions on Multimedia, Volume 11, No. 1, January 2009, 1-10
- 4 S. Heinzl, D. Seiler, E. Juhnke, T. Stadelmann, R. Ewerth, M. Grauer, B. Freisleben:  
*A Scalable Service-Oriented Architecture for Multimedia Analysis, Synthesis, and Consumption*  
In: International Journal of Web and Grid Services, Inderscience Publishers, Vol. 5, Issue 3,  
2009, 219-260
- 5 R. Ewerth, M. Mühling, B. Freisleben:  
*Self-Supervised Learning of Face Appearances in TV Casts and Movies*  
Invited Paper (Best papers from IEEE International Symposium on Multimedia '06):  
International Journal on Semantic Computing, World Scientific, June 2007, 185-204

### International Conferences and Workshops (peer-reviewed)

- 6 M. Mühling, R. Ewerth, J. Zhou, B. Freisleben:  
*Multimodal Video Concept Detection via Bag of Auditory Words and Multiple Kernel Learning*  
Submitted to: 18<sup>th</sup> International Conference on MultiMedia Modelling (MMM 2012), Klagenfurt,  
Austria
- 7 M. Mühling, R. Ewerth, B. Shi, B. Freisleben:  
*Multi-class Object Detection via Hough Forests Using Local Histograms of Visual Words*  
In: Proceedings of 14<sup>th</sup> Int'l Conference on Computer Analysis of Images and Patterns (CAIP),  
Seville, Spain, Lecture Notes on Computer Science (LNCS), Springer, 2011, accepted for  
publication.

- 8 M. Mühlning, R. Ewerth, B. Shi, B. Freisleben:  
*On the Spatial Extents of SIFT Descriptors for Visual Concept Detection*  
In: Proceedings of 8<sup>th</sup> Int'l Conference on Computer Vision Systems (ICVS), Sophia Antipolis, Lecture Notes on Computer Science (LNCS), Springer, 2011, accepted for publication.
- 9 D. Seiler, E. Juhnke, R. Ewerth, M. Grauer, B. Freisleben:  
*Efficient Data Transmission Between Multimedia Web Services via Aspect-Oriented Programming*  
In: Proceedings of ACM Int'l Conference on Multimedia Systems 2011, San Jose, USA, ACM Press, 2011, 93-104
- 10 D. Seiler, E. Juhnke, R. Ewerth, M. Smith, B. Freisleben:  
*Request/Response Aspects for Web Services*  
In: Proceedings of 23<sup>rd</sup> Int'l Conference on Advanced Information Systems 2011, London, UK, Lecture Notes on Computer Science (LNCS), Volume 6741, Springer, 2011, 627-641.
- 11 P. Abend, T. Thielmann, R. Ewerth, D. Seiler, M. Mühlning, J. Döring, M. Grauer, B. Freisleben:  
*Geobrowsing the Globe: A Geovisual Analysis of Google Earth Usage*  
In Online Proc. of: Linking GeoVisualization with Spatial Analysis and Modeling (GeoViz) 2011, [http://www.geomatik-hamburg.de/geoviz/abstracts/36\\_GeoViz%202011%20Geobrowsing.pdf](http://www.geomatik-hamburg.de/geoviz/abstracts/36_GeoViz%202011%20Geobrowsing.pdf), Hamburg, 1-3.
- 12 T. Stadelmann, Y. Wang, M. Smith, R. Ewerth, B. Freisleben:  
*Rethinking Algorithm Design and Development in Speech Processing*  
In: Proceedings of 20<sup>th</sup> International Conference on Pattern Recognition, Istanbul, Turkey, 2010, 4476-4479.
- 13 R. Ewerth, J. P. Harries, B. Freisleben:  
*Mobile OCR on the iPhone for Different Types of Text Documents*  
In: Proceedings of 2<sup>nd</sup> International Workshop on Mobile Multimedia Processing (in conjunction with 20<sup>th</sup> Int'l Conference on Pattern Recognition), Istanbul, Turkey, 2010, 1-8.
- 14 R. Ewerth, B. Freisleben:  
*Performance Prediction for Unsupervised Video Indexing*  
In: Proceedings of 13th International Conference on Computer Analysis of Images and Patterns, Münster, 2009, 1036-1043
- 15 R. Ewerth, B. Freisleben:  
*Unsupervised Detection of Gradual Shot Changes with Motion-Based False Alarm Removal*  
In: Proceedings of 8th International Conference on Advanced Concepts for Intelligent Vision Systems, Bordeaux, 2009, 253-264
- 16 M. Mühlning, R. Ewerth, B. Freisleben:  
*Improving Semantic Video Retrieval via Object-Based Features*  
In: Proceedings of 3<sup>rd</sup> IEEE International Conference on Semantic Computing, San Diego, USA, 109-115

- 17 D. Seiler, S. Heinzl, E. Juhnke, R. Ewerth, M. Grauer, B. Freisleben:  
*Efficient Data Transmission in Service Workflows for Distributed Video Content Analysis*  
Best Paper Candidate. In: Proceedings of the 6th International Conference on Advances in Mobile Computing & Multimedia (MoMM2008), ACM and OCG Book Series, 2008, 7-14
- 18 R. Ewerth, B. Freisleben:  
*Semi-Supervised Learning for Semantic Video Retrieval*  
In: Proceedings of ACM International Conference on Image and Video Retrieval (CIVR), Amsterdam, The Netherlands, ACM Press, 2007, 154-161
- 19 R. Ewerth, M. Schwalb, B. Freisleben:  
*Using Depth Features to Retrieve Monocular Video Shots*  
In: Proceedings of ACM International Conference on Image and Video Retrieval (CIVR), Amsterdam, The Netherlands, ACM Press, 2007, 210-217
- 20 M. Mühling, R. Ewerth, T. Stadelmann, B. Freisleben, R. Weber, K. Mathiak  
*Semantic Video Analysis for Psychological Research on Violence in Computer Games*  
In: Proceedings of ACM International Conference on Image and Video Retrieval (CIVR), Amsterdam, The Netherlands, ACM Press, 2007, 611-618
- 21 R. Ewerth, B. Freisleben:  
*Adapting Appearance Models of Semantic Concepts for a Particular Video via Transductive Learning*  
In: Proceedings of 13<sup>th</sup> ACM International Workshop on Multimedia Information Retrieval, Augsburg, Germany, ACM Press, 2007, 187-196
- 22 R. Ewerth, M. Schwalb, P. Tessmann, B. Freisleben:  
*Segmenting Moving Objects in the Presence of Camera Motion*  
In: Proceedings of 14th International Conference on Image Analysis and Processing Modena, Italy, IEEE Press, 2007, 819-824
- 23 R. Ewerth, M. Mühling, B. Freisleben:  
*Self-Supervised Learning of Face Appearances in TV Casts and Movies*  
Best Paper Candidate. In: Proceedings of the 6th IEEE International Symposium on Multimedia 2006, San Diego, USA, IEEE Press, 2006, 78-85
- 24 R. Ewerth, B. Freisleben:  
*Self-Supervised Learning for Robust Video Indexing*  
In: IEEE 7th International Conference on Multimedia & Expo, Toronto, Canada, IEEE Press, 2006, 1749-1752
- 25 M. Smith, B. Klose, R. Ewerth, T. Friese, M. Engel, B. Freisleben:  
*Runtime Integration of Reconfigurable Hardware in Service-Oriented Grids*  
In: Proceedings of the IEEE International Conference on Web Services (ICWS), Chicago, USA, IEEE Press, 2006, 945-948

- 26 R. Ewerth, T. Friese, M. Grube, B. Freisleben:  
*Grid Services for Distributed Video Cut Detection*  
In: Proceedings of the 6th IEEE Int. Symposium on Multimedia Software Engineering, Miami, USA, IEEE Press, 2004, 164-168
- 27 J. Gllavata, R. Ewerth, B. Freisleben:  
*A Text Detection, Localization and Segmentation System for OCR in Images*  
In: Proceedings of the 6th IEEE Int. Symposium on Multimedia Software Engineering, Miami, USA, IEEE Press, 2004, 310-317
- 28 J. Gllavata, R. Ewerth, B. Freisleben:  
*Tracking Text in MPEG Videos*  
In: Proceedings of 12th ACM Conference on Multimedia, New York City, USA, ACM Press, 2004, 240-243
- 29 R. Ewerth, B. Freisleben:  
*Video Cut Detection without Thresholds*  
In: Proc. of 11th Workshop on Signals, Systems and Image Processing, Poznan, Poland, PTETIS, 2004, 227-230
- 30 R. Ewerth, B. Freisleben:  
*Improving Cut Detection in MPEG Videos by GOP-Oriented Frame Difference Normalization*  
In: Proceedings of 17th International Conference on Pattern Recognition, Vol. 2, Cambridge, UK, IAPR, IEEE Press, 2004, 807-810
- 31 J. Gllavata, R. Ewerth, B. Freisleben:  
*Text Detection in Images Based on Unsupervised Classification of High-Frequency Wavelet Coefficients*  
In: Proc. of 17th International Conf. on Pattern Recognition, Vol. 1, Cambridge, UK, IAPR, IEEE Press, 2004, 425-428
- 32 R. Ewerth, M. Schwalb, P. Tessmann, B. Freisleben:  
*Estimation of Arbitrary Camera Motion in MPEG Videos*  
In: Proceedings of 17th International Conference on Pattern Recognition, Vol. 1, Cambridge, UK, IAPR, IEEE Press, 2004, 512-515
- 33 J. Gllavata, R. Ewerth, T. Stefi, B. Freisleben:  
*Unsupervised Text Segmentation Using Color and Wavelet Features*  
In: Proceedings of the 3rd International Conference on Image and Video Retrieval, Dublin, Ireland, LNCS 3115, Springer-Verlag, 2004, 216-224
- 34 J. Gllavata, R. Ewerth, B. Freisleben:  
*Finding Text in Images via Local Thresholding*  
In: Proceedings of the IEEE International Symposium on Signal Processing and Information Technology (ISSPIT 2003), Darmstadt, Germany, IEEE Press, 2003, 539-542

- 35 R. Ewerth, B. Freisleben:  
*Frame Difference Normalization: an Approach to Reduce Error Rates of Cut Detection Algorithms for MPEG Videos*  
In: Proceedings of the IEEE International Conference on Image Processing, Vol. II, Barcelona, Spain, IEEE Press, 2003, 1009-1012
- 36 J. Gllavata, R. Ewerth, B. Freisleben:  
*A Robust Algorithm for Text Detection in Images*  
In: Proceedings of the 3rd International Symposium on Image and Signal Processing and Analysis, Rome, Italy, 2003, 611-616

### **National Conferences and Workshops (peer-reviewed)**

- 37 D. Seiler, R. Ewerth, S. Heinzl, T. Stadelmann, M. Mühling, B. Freisleben, M. Grauer:  
*Eine service-orientierte Grid-Infrastruktur zur Unterstützung medienwissenschaftlicher Filmanalyse*  
In: Proceedings of GeNeMe Workshop, Gemeinschaften in neuen Medien, Dresden, 2009

### **TRECVID Evaluations (Int'l Workshop, presumes submission of a system run)**

- 38 M. Mühling, R. Ewerth, B. Freisleben:  
*University of Marburg at TRECVID 2010: Semantic Indexing*  
In: Proceedings of TREC Video Retrieval Evaluation Workshop 2010, to appear
- 39 M. Mühling, R. Ewerth, T. Stadelmann, B. Shi, B. Freisleben:  
*University of Marburg at TRECVID 2009: High-Level Feature Extraction*  
In: Online Proceedings of TREC Video Retrieval Evaluation Workshop 2009  
<http://www-nlpir.nist.gov/projects/tvpubs/tv.pubs.org.html>
- 40 M. Mühling, R. Ewerth, T. Stadelmann, B. Shi, B. Freisleben:  
*University of Marburg at TRECVID 2008: High-Level Feature Extraction*  
In: Online Proceedings of TREC Video Retrieval Evaluation Workshop 2008  
<http://www-nlpir.nist.gov/projects/tvpubs/tv.pubs.org.html>
- 41 M. Mühling, R. Ewerth, T. Stadelmann, B. Shi, C. Zoefel, B. Freisleben:  
*University of Marburg at TRECVID 2007: Shot Boundary Detection and High-Level Feature Extraction*  
In: *Online* Proceedings of TREC Video Retrieval Evaluation Workshop 2007  
<http://www-nlpir.nist.gov/projects/tvpubs/tv.pubs.org.html>
- 42 R. Ewerth, M. Mühling, T. Stadelmann, E. Oeli, B. Agel, D. Seiler, B. Freisleben:  
*University of Marburg at TRECVID 2006: Shot Boundary Detection and Rushes Task Results*  
In: Online TREC Video Retrieval Evaluation Proceedings, 2006:  
<http://www-nlpir.nist.gov/projects/tvpubs/tv.pubs.org.html>

- 43 R. Ewerth, C. Beringer, T. Kopp, M. Niebergall, T. Stadelmann, B. Freisleben:  
*University of Marburg at TRECVID 2005: Shot Boundary Detection and Camera Motion Estimation Results*  
In: TREC Video Retrieval Evaluation Online Proceedings, 2005  
<http://www-nlpir.nist.gov/projects/tvpubs/tv.pubs.org.html>

**International and National Journals, Books, Conferences and Workshops (no peer-review)**

- 44 R. Ewerth, B. Freisleben:  
*Automatic Classification of State Heads and Common People?*  
In: Ludes, P. & Herzog, O. (eds.): Algorithms of Power – Key Invisibles, LIT Verlag, Münster, Germany, 2011, 95-114.
- 45 R. Ewerth, M. Mühling, T. Stadelmann, D. Seiler, B. Freisleben:  
*Multimedia Computing (in German)*  
In: Research Report, High-Performance Computing in Hessen 2009, Darmstadt, 140-143
- 46 R. Ewerth, M. Mühling, T. Stadelmann, J. Gllavata, M. Grauer, B. Freisleben:  
*Videana: A Software Tool for Scientific Film Studies*  
In: Proceedings of International Workshop on Digital Tools in Film Studies, Siegen, Transcript Verlag, Bielefeld, Germany, 2009, 101-116
- 47 R. Ewerth, B. Freisleben:  
*Verfahren zur automatischen Annotation und Erschließung von Videomaterial (in German)*  
In: „Benutzerfreundlich – rationell – standardisiert. Aktuelle Anforderungen an archivische Erschließung und Findemittel“, Hrsg. Frank M. Bischoff, Tagungsband des 11. Archivwissenschaftlichen Kolloquiums 2006, Archivschule Marburg, 2007, 259-280
- 48 R. Ewerth, B. Freisleben:  
*Computerunterstützte Filmanalyse mit Videana (in German)*  
In: Augen-Blick: Hefte zur Medienwissenschaft, Heft 39, Schüren-Verlag, 2007, 54-66
- 49 R. Ewerth, B. Freisleben:  
*Gesichtsdetektion und -erkennung in Bildern und Videos für die medienwissenschaftliche Analyse (in German)*  
In: „Gesichtsdetektionen in den Medien des 20. Jahrhunderts“, W. Beilenhoff, W. Hülk, K. Kreimeier, und M. Erstic (eds.), Universi Verlag, 2006, 156-172
- 50 R. Ewerth, J. Gllavata, M. Gollnick, F. Mansouri, E. Papalilo, R. Sennert, J. Wagner, B. Freisleben, M. Grauer:  
*Methoden und Werkzeuge zur rechnergestützten medienwissenschaftlichen Analyse (in German)*  
In: Siegener Periodicum zur Int. Empirischen Literaturwissenschaft, 20, H. 2, 2003, 306-320