Svitlana ZINGER

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PROFESSIONAL EXPERIENCE

2013 - present:	**Assistant professor (tenure track)**	Video Coding and Architectures research group, Signal Processing Systems, Eindhoven University of Technology, Eindhoven, the Netherlands
	Subjects:	2D/3D Video Processing, Analysis and Applications
2013 – present:	**Researcher position**	Kempenhaeghe – Academic center for Epileptology, Sleep Medicine and Neurological Learning & development disabilities, Heeze, the Netherlands
	Subject:	Medical Image Analysis in Epilepsy and Autism
2008 – 2013:	**Postdoctoral position**	Video Coding and Architectures research group, Signal Processing Systems, Eindhoven University of Technology, Eindhoven, the Netherlands
	Subjects:	Free-viewpoint 3D video generation, video content analysis
2006 - 2008:	**Postdoctoral position**	Center for Language and Cognition Groningen (CLCG), University of Groningen, Groningen, the Netherlands
	Subject:	Information retrieval for handwritten documents; in the framework of the SCRATCH (SCRipt Analysis Tools for Cultural Heritage) project of the NWO (Netherlands Organisation for Scientific Research)
	Participating institutions:	Artificial Intelligence Department at University of Groningen, Nationaal Archief
2005:	**Postdoctoral scholarship**	Multimedia and Multilingual Knowledge Engineering Laboratory, CEA (Commissariat à l'Energie Atomique), Paris, France

	Subject:	Creation of large-scale image ontology; in the framework of the MUSCLE (Multimedia Understanding through Semantics, Computation and Learning) Network of Excellence
		Exploration of text and image processing techniques for pattern recognition; using lexical resources for finding portrayable objects in text and for image ontology creation
2000:	**Internship**	Signal and Image Processing Department, ENST (Ecole Nationale Supérieure des Télécommunications), Paris, France
	Subject:	Optimization of digital watermarking performances using different coding strategies

TEACHING EXPERIENCE

Basiskwalificatie Onderwijs – BKO (University Teaching Qualification) obtained in 2013

2013 – present:	**Development of a new Bachelor course**	Video Coding and Architectures research group, Signal Processing Systems, Eindhoven University of Technology, Eindhoven, the Netherlands
	Specialty:	Enabling Technologies for sports, 5XSF0
	Subject:	Spatial domain processing, filtering, feature extraction, image restoration, color image processing
	Contribution:	Development of lectures and computer class assignments
2009 – present:	**Master of science and Bachelor course**	Video Coding and Architectures research group, Signal Processing Systems, Eindhoven University of Technology, Eindhoven, the Netherlands
	Specialty:	Fundamentals of Medical Image Processing, 5LL70
	Subject:	Spatial and frequency domain processing, morphological image processing, image restoration, color image processing
	Contribution:	Development and providing of lectures for explaining the practical exercises in Matlab, development of 4 sets of computer exercises, checking student reports on the computer exercises
2008 – present:	**Master of science courses**	Video Coding and Architectures research group, Signal Processing Systems, Eindhoven University of Technology, Eindhoven, the Netherlands
	Specialty:	Advanced video content analysis and video compression, 5DD50
	Subject:	Visual feature extraction, content analysis and classification
	Contribution:	Development and providing of lectures on theory for video analysis, development of computer exercises, checking students' reports on computer exercises
2008:	**Course, term paper, Bachelor project**	Center for Language and Cognition Groningen, University of Groningen, Groningen, the Netherlands
	Specialty:	Natural language processing
	Subject:	Information retrieval for handwritten documents

	Contribution:	Theory and practice teaching, preparation of software and tasks for computer exercises, checking students' reports, examining the knowledge acquired by the students
2007:	**Course, term paper, Bachelor project**	Center for Language and Cognition Groningen, University of Groningen, Groningen, the Netherlands
	Specialty:	Natural language processing
	Subject:	Sequence comparison
	Contribution:	Theory and practice teaching, preparation of software and tasks for computer exercises, checking students' reports, examining the knowledge acquired by the students
2003:	**Student project co-supervision**	Signal and Image Processing Department, Ecole Nationale Supérieure des Télécommunications, Paris, France
	Specialty:	Image analysis
	Subject:	Median filtering for digital elevation model interpolation
2002, 2003:	**Master of science courses**	Ecole Nationale des Sciences Géographiques, Marne-la-Vallée, France
	Specialty:	Digital photogrammetry, metric image and 3D vision
	Subject:	Spatial data interpolation

STUDENT SUPERVISION

PhD students

Arash Pourtaherian, "Needle detection and tracking in 3D ultrasound", 2013 – present

Fons van der Sommen, "Computer vision for medical image analysis: applications in endoscopy and interventional X-ray", 2012 – present

Xinfeng Bao, "Spatial-temporal segmentation of ships in surveillance video", 2011 – present

Solmaz Javanbakhti, "Video context analysis in real-time", 2010 – present

Selcuk Sandikci, "Group behavior analysis in surveillance video", 2010 – 2011

Luat Do, "Free-viewpoint DIBR for 3DTV", 2009 – present (to be defended in 2014)

PDEng students

Antoine Bernas, "(f)MRI image analysis for neurodegeneration studies in late-onset epilepsy", 2014 – present

Eleni Fotiadou, "Video-based facial discomfort analysis for infants", 2012 – 2013, **Nominated for 2014 TU/e Design Project Award**

Master students

Bianca Slaats, "Video analysis for acute pain detection in infants", 2014 – present
Patrick Langenhuizen, "Optical coherence tomography for medical imaging", 2014 – present
Louis Dercourt, "Real-time detection of early esophageal cancer", 2014 – present, Erasmus program student from Ecole d'Ingenieurs ISEN Brest
Lieneke Kusters, "Localizing a catheter tip in three-dimensional ultrasound", 2014
Mark van Gastel, "E-health video system to analyse performance in rehabilitation cycling", 2013-2014
Matthijs Zwemer, "A vision-based approach for tramway rail extraction", 2013-2014
Arash Pourtaherian, "Needle detection in three-dimensional ultrasound imaging", 2013
Antoine Bernas, "Investigation on resting state functional connectivity in high-functioning adolescents with autism spectrum disorders", 2013, Erasmus program student from Ecole d'Ingenieurs ISEN Brest
Fons van der Sommen, "Automatic detection of early stage esophagus cancer in endoscopic images", 2011 – 2012, **Cum Laude**
Rene Besseling, "Prostate segmentation and cancer detection in ultrasound video", 2009
Luat Do, "Evaluation of new free-viewpoint DIBR techniques", 2008 – 2009

Bachelor students

Koen Diesveld, "2D vs 3D laparoscopic surgery training", 2014 – present
Leontien Cremers, "System design for discomfort and pain monitoring in infants", 2014 – present,
Honours program
Pieter-Paul Luijten, "Region labeling", 2013
Coen Custers, "Fall detection in patient monitoring video", 2012
Willem Sanberg, "PTZ video surveillance on a BeagleBoard", 2011

Internship students

Tong Geng, "Subjective evaluation of free-viewpoint 3D video quality", 2014 – present
Ronak Gowadia, "Human detection and tracking in an operating room", 2014 – present
Patrick Langenhuizen, "Comparative study for region of interest selection in surveillance videos", 2013-2014
Jorie Teunissen, "Comparative study of robust vehicle tracking algorithms", 2013
Maurice Camp, "Colonoscopy pit-pattern classification based on shape features", 2012
Wouter Ouwens, "Fast fall detection on clinical videos", 2012
Arnaud Setio, "Evaluation of Textural Features for the Detection of Early Stage Cancer using High Definition Endoscopy", 2012
Weilu Li, "Finding the optimal color space for the automatic detection of irregularities in the esophagus", 2012
Zijian Xu, "Semantic region labeling for surveillance video", 2012
Arash Pourtaherian, "Texture features for cancer detection in endoscopic videos", 2012
Sahana Prabhu, "Head and shoulder people detection using HOG", 2011
Peng Li, "Influence of stereoscopic parameters on perceived depth", 2010

		EDUCATION
2011 - present:	**Courses for employees**	Eindhoven University of Technology, Eindhoven, the Netherlands

	Subjects:	Subsidy acquisition for research, scientific project management, teaching and learning in higher education, presentation skills, academic leadership for assistant professors
2001 - 2004:	**Ph.D. thesis**	Signal and Image Processing Department, ENST (Ecole Nationale Supérieure des Télécommunications), Paris, France
	Specialty:	Signal and image processing
	Subject:	Interpolation and resampling of 3D data and its application for urban cartography and for determination of cosmic microwave background
	Advisor:	Prof. Henri Maître
	Participating institutions:	Thales, Eurosense, Institut Géographique National, Collège de France
1995-2000:	**Bachelor and Master studies, Cum Laude**	Faculty of Radiophysics, Dnipropetrovsk State University, Dnipropetrovsk, Ukraine
	Specialty:	Digital signal and image processing
	Subject:	Prediction of non-stationary stochastic processes based on adaptive neural networks

SUBSIDY APPLICATIONS

Participation in successful proposal preparations (funding acquired):

D-Sens – Depth Sensing Systems for People Safety, EU project (FP7)

ACCUS - Adaptive Cooperative Control in Urban (sub) Systems, EU project (Artemis)

GARDIAN - GAstroesophageal Reflux disease DIagnosis by video Analysis for Neonates, Dutch national STW project (High tech Systemen & Materialen)

Submitted:

Horizon 2020 proposal on healthcare technology

Proposals in preparation:

EU Ambient Assisted Living – on 3D vision for robotics,

STW Open technologieprogramma – on colon cancer detection

STW Open technologieprogramma – on tumor cell detection

SCHOLARSHIPS, ACHIEVEMENTS

Best oral presentation award at the 6th International Conference on Machine Vision, London, UK, 2013

Best poster presentation award at Biomedica conference, Aachen, Germany, 2013

Best paper award on the 1st IEEE International Conference on Consumer Electronics Berlin (ICCE-Berlin), Germany, 2011

Contributor to IBM Faculty Award winning Monk system - a distinctive IT system that enables quick and efficient searching through handwritten documents and archives, 2011

Second place in Digital Heritage award competition (at http://www.dish2009.nl/) for the historic handwritten script analysis project (postdoc 2006-2008), 2009

Network of Excellence scholarship for postdoctoral research, provided by the European Research Consortium for Informatics and Mathematics (worldwide open competition), 2005

Telecom ParisTech PhD scholarship (bourse d'EGIDE pour etudiant-chercheur), 2001-2004

Cum Laude Master degree in Computer Science, 2000

State scholarship for top 10% of the university students for Master studies including research internship, 1999

INTERNATIONAL EXPERIENCE

Netherlands – assistant professor (tenure track), postdoctoral researcher and lecturer (9 years)

France – internship student (5 months), PhD student (3.5 years), postdoctoral researcher (9 months)

Ukraine – school (10 years) and university studies (5 years)

PROFESSIONAL ACTIVITIES

Project leader of the Dutch consortium of the Europian iGlance project

Programme committee member for

8th EACL (European Chapter of the Association for Computational Linguistics) Workshop on Language Technology for Cultural Heritage, Social Sciences, and Humanities, 2014

ACL (association for Computational Linguistics) 2013 workshop on Language Technology for Cultural Heritage, Social Sciences, and Humanities

EACL 2012 workshop on Language Technology for Cultural Heritage, Social Sciences, and Humanities

ECAI (European Conference on Artificial Intelligence) 2010 workshop on Language Technology for Cultural Heritage, Social Sciences, and Humanities

EACL 2009 workshop on Language Technology and Resources for Cultural Heritage, Social Sciences, Humanities, and Education

Reviewed papers for
IEEE Signal Processing Letters
3D Research
Neurocomputing
IEEE Fourth International Conference on Consumer Electronics – Berlin
International Symposium on Wearable Computers
ACM Transactions on Multimedia Computing, Communications and Applications
IEEE Transactions on Broadcasting
Pattern Recognition Letters
IEEE Transactions on Multimedia
Journal of Optical Engineering
IEEE Transactions on Circuits and Systems for Video Technology
Journal of Communications, Special Issue on Multimedia Computing and Communications
Journal of Visual Communication and Image Representation
IEEE Transactions on Pattern Analysis and Machine Intelligence
IEEE Transactions on Image Processing
International Conference on Document Analysis and Recognition

Reviewer for grant application at National Research Fund of Luxembourg

Panel member for Master projects related to image and video analysis in Electrical Engineering department, TU/e
Participant in Bachelor and Master student orientation events for course and project selection, TU/e

EXPERTISE

Mathematics	Sequence comparison. Pattern recognition: clustering and segmentation. Interpolation and sampling theory. Statistics, geostatistics. Probability theory. Stochastic processes. Solutions of ill-posed problems: Wiener filters and regularized inverse problems. Time series analysis. Fuzzy sets theory. Neural networks. Matrix theory and linear algebra.
Digital Signal and Image processing	Free-viewpoint 3D video. Image indexing and retrieval. Inverse problems. Image interpolation preserving discontinuities. Digital watermarking. Time series analysis and prediction methods. Iterative and direct methods for signal and image restoration. Morphological image processing.
Computer skills	Matlab, Python, C, Pascal, MathCAD, AutoCAD, Lisp, FoxPro, Windows, DOS, Unix, Microsoft Office, Latex, HTML.

LANGUAGES

English - fluent (General Professional Proficiency level according to the TOEIC exam)
Dutch – fluent (Nederlands als Tweede Taal, niveau 2 – NT2-II diploma)
French – very good
Russian - native
Ukrainian - fluent

PUBLICATIONS

62 scientific publications

Book Chapters

L. Do, **S. Zinger**, P.H.N. de With, "Free-viewpoint 3DTV: system architecture, rendering techniques and perceptual improvements", in R. Schettini (Ed.), The Handbook of Digital Imaging, Volume 2: Media Imaging, Wiley & Sons, October 2014.

S. Zinger, D. Ruijters, R. M. Snoeren, C. Papalazarou, P. H. N. de With, "Innovations in 3D Interventional X-ray Imaging", Handbook of Medical and Healthcare Technologies, edited by Borko Furht and Ankur Agarwal, Springer New York, ISBN: 978-1-4614-8494-3, pp. 79-119, 2013. doi:10.1007/978-1-4614-8495-0_4

S. Zinger, L. Do, P. H. N. de With, G. Petrovic, Y. Morvan, "Free-Viewpoint 3DTV: view interpolation, coding, and streaming", in R.A. Farrugia & C.J. Debono (Eds.), Multimedia networking and coding, pp. 235-253. Hershey: IGI Global. 2012.

S. Zinger, Y. Morvan, D. Ruijters, L. Do, P. H. N. de With, "Multi-View Autostereoscopic Visualization using Bandwidth-Limited Channels", in A.S. Malik, T.S. Choi & H. Nisar (Eds.), Depth Map and 3D Imaging Applications: Algorithms and Technologies, ISBN10: 1613503261, pp. 363-378, IGI Global, November 2011. doi:10.4018/978-1-61350-326-3.ch019.

Journal articles

I. M. Creusen, S. Javanbakhti, M. J. H. Loomans, L. B. Hazelhoff, N. Roubtsova, **S. Zinger**, P. H. N. de With, "ViCoMo: visual context modeling for scene understanding in video surveillance", Journal of Electronic Imaging 22 (4), October 2013.

X. Bao, S. Javanbakhti, **S. Zinger**, R. Wijnhoven, P. H. N. de With, "Context modeling combined with motion analysis for moving ship detection in port surveillance", Journal of Electronic Imaging 22 (4), October 2013.

L. Do, G. Bravo, **S. Zinger**, P. H. N. de With, "GPU-accelerated real-time free-viewpoint DIBR for 3DTV", IEEE Transactions on Consumer Electronics 58 (2), pp. 633-640, May 2012.

S. Zinger, L. Do, P. H. N. de With, "Recent developments in free-viewpoint interpolation for 3DTV", 3D Research 3 (1), 6 pp., March 2012.

S. Zinger, D. Ruijters, L. Do, P. H. N. de With, "View Interpolation for Medical Images on Autostereoscopic Displays", IEEE Transactions on Circuits and Systems for Video Technology 22 (1), pp. 128-137, January 2012.

S. Zinger, L. Do, P. H. N. de With, "Free-viewpoint depth image based rendering", Journal of Visual Communication and Image Representation 21 (5-6), pp. 533-541, July 2010.

T. van der Zant, L. Schomaker, **S. Zinger**, H. van Schie, "Where are the Search Engines for Handwritten Documents?", Interdisciplinary Science Reviews 34 (2-3), pp. 224-235, September 2009.

D. Ruijters, **S. Zinger**, L. Do, P. H. N. de With, "Latency optimization for autostereoscopic volumetric visualization in image-guided interventions", Neurocomputing, Special issue on Advanced Computing for Image-Guided Intervention, 2014. (*in press*)

F. van der Sommen, **S. Zinger**, E. J. Schoon, P. H. N. de Width, "Supportive automatic annotation of early esophageal cancer using local gabor and color features", Neurocomputing, Special issue on Advanced Computing for Image-Guided Intervention, 2014. (*in press*)

Journal abstracts

F. van der Sommen, **S. Zinger**, P. H. N. de With, E. J. Schoon, "Computer-Aided Detection of Early Neoplastic Lesions in Barrett's Esophagus: Towards a Supportive Detection System in Endoscopy", Gastroenterology 146 (5), S-141, May 2014

E. J. Schoon, F. van der Sommen, **S. Zinger**, P. H. de With, "Computer-Aided Delineation of Early Neoplasia in Barrett's Esophagus Using High Definition Endoscopic Images", Gastrointestinal Endoscopy 77 (5), May 2013.

Conference proceedings articles

F. van der Sommen, **S. Zinger**, P. H. N. With, E. J. Schoon, "Computer-aided detection of early neoplastic lesions in Barrett's esophagus : towards a supportive detection system in endoscopy", Proceedings of the Digestive Disease Week (DDW2014), Chicago, Illinois, American Gastroenterology Association (AGA), 2-6 May 2014.

F. van der Sommen, **S. Zinger**, E. J. Schoon, P. H. N. de With, "Computer-aided detection of early cancerous lesions in the esophagus using local Gabor and color features of HD endoscopic images", Proceedings of the Netherlands Conference on Computer Vision (NCCV), Ermelo, The Netherlands, April 24-25, 2014.

E. Fotiadou, **S. Zinger**, W. E. Tjon a Ten, S. Bambang Oetomo, P. H. N. de With, "Video-based facial discomfort analysis for infants", Proceedings for IS&T/SPIE Electronic Imaging, 9029, Visual Information and Communication V, 90290F, San Francisco, California, USA, February 2014.

F. van der Sommen, **S. Zinger**, E. J. Schoon, P. H. N. de With, "Automatic annotation of early cancer in Barrett's Esophagus : a Gabor-based approach", BIOMEDICA 2013: The European Life Sciences Summit, 18-19 June, Aachen, Germany, 2013. ***Best poster presentation award.***

X. Bao, **S. Zinger**, R. Wijnhoven, P. H. N. de With, "Robust moving ship detection using context-based motion analysis and occlusion handling", Sixth International Conference on Machine Vision (ICMV 2013), London, UK, 2013. ***Best oral presentation award.***

X. Bao, **S. Zinger**, R. Wijnhoven, P. H. N. de With, "Ship detection in port surveillance based on context and motion saliency analysis", Proceedings for IS&T/SPIE Electronic Imaging, Video Surveillance and Transportation Imaging Applications, 3-7, San Francisco, California, (Proceedings of SPIE, 8663, pp. 86630D-1/8). Bellingham: SPIE, February 2013.

A. Setio, F. van der Sommen, **S. Zinger**, E. J. Schoon, P. H. N. de With, "Evaluation and comparison of textural feature representation for the detection of early stage cancer in endoscopy", Proceedings of the 8th International Conference on Computer Vision Theory and Applications (VISAPP'13), Barcelona, Spain, 21-24 February 2013.

F. van der Sommen, **S. Zinger**, E. J. Schoon, P. H. N. de With, "Computer-aided detection of early cancer in the esophagus using HD endoscopy images", Proceedings of SPIE Medical Imaging, Orlando, Florida, (8670, pp. 8670OV-1/12), 9-14 February 2013.

X. Bao, **S. Zinger**, R. Wijnhoven, P. H. N. de With, "Water region detection supporting ship traffic analysis in port surveillance", Proceedings of the 14th International Conference on Advanced Concepts for Intelligent Vision Systems (ACIVS), Brno, Czech Republic, pp. 444-454, 4-7 September 2012.

F. van der Sommen, **S. Zinger**, P. H. N. de With, E. J. Schoon, "Computer-aided detection of early neoplasia in the esophagus using high definition endoscopic images", in T Rösch (Ed.), UEG (United European Gastroenterology) Week 2012, Amsterdam, Netherlands, October 20-24 2012.

S. Javanbakhti, **S. Zinger**, P. H. N. de With, "Fast abnormal event detection from video surveillance", Proceedings of the IPCV'12, the 16th International Conference on Image Processing, Computer Vision, and Pattern Recognition, Las Vegas, Nevada, pp. 144-150, July 2012.

X. Bao, **S. Zinger**, P. H. N. de With, R. Wijnhoven, J. Han, "Water region and multiple ship detection for port surveillance", Proceedings of the 33rd WIC Symposium on Information Theory in the Benelux joint with the 2nd WIC/IEEE SP Symposium on Information Theory and Signal Processing in the Benelux, Boekeloo, Netherlands, pp. 1-8, 24-25 may 2012.

S. Javanbakhti, **S. Zinger**, P. H. N. de With, "Fast sky and road detection for video context analysis", Proceedings of the 33rd WIC Symposium on Information Theory in the Benelux joint with the 2nd WIC/IEEE SP Symposium on Information Theory and Signal Processing in the Benelux, Boekeloo, The Netherlands, pp. 212-219, 24-25 May 2012.

L. Do, G. Bravo, **S. Zinger**, P. H. N. de With, "Real-time free-viewpoint DIBR on GPUs for large base-line multi-view 3DTV videos", IEEE Visual Communications and Image Processing (VCIP), ISBN 978-1-4577-1321-7, pp. 1-4, Tainan (Taiwan), November 2011. doi:10.1109/VCIP.2011.6115937.

G. Bravo, L. Do, **S. Zinger**, P. H. N. de With, "Real-time free-viewpoint DIBR on GPUs for 3DTV systems", 2011 IEEE International Conference on Consumer Electronics - Berlin (ICCE-Berlin), ISBN: 978-1-4577-0233-4, pp. 1-4, Berlin (Germany), September 2011. doi:10.1109/ICCE-Berlin.2011.6031881. ***Best Paper Award***.

S. Sandikci, **S. Zinger**, P. H. N. de With, "Detection of human groups in videos", J. Blanc-Talon, R. Kleihorst, W. Philips, D. Popescu & P. Scheunders (Eds.), Advanced Concepts for Intelligent Vision Systems, ISBN: 0302-9743, pp. 507-518, Springer, Ghent (Belgium), August 2011.

S. Javanbakhti, **S. Zinger**, P. H. N. de With, "Context analysis: sky, water and motion", 32nd WIC Symposium on Information Theory in the Benelux 2011, ISBN: 978-1-61839-219-0, pp. 1-8, Brussels (Belgium), May 2011.

S. Sandikci, **S. Zinger**, P. H. N. de With, "Detection of human groups in videos", P.H.N. With & P. Shrestha (Eds.), Proceedings of the International Workshop on Computer Vision Applications (CVA), ISBN 978-90-386-2474-7, pp. 99-101, Eindhoven (Netherlands), March 2011.

S. Javanbakhti, **S. Zinger**, P .H .N. de With, "Context analysis: sky, water and motion", International Workshop on Computer Vision Applications (CVA), ISBN 978-90-386-2474-7, pp. 115-116, Eindhoven (Netherlands), March 2011.

L. Do, **S. Zinger**, P. H. N. de With, "Warping error analysis and reduction for depth image based rendering in 3DTV", IS&T / SPIE Electronic Imaging, Stereoscopic Displays and Applications XXI, 9 pages, San Francisco (USA), January 2011.

F. Bruls, **S. Zinger**, L. Do, "Multi-view Coding and View Synthesis for 3DTV", IEEE International Conference on Consumer Electronics (ICCE), pp. 698-699, Las Vegas (USA), January 2011.

E. Bondarev, R. Miquel, M. Imbert, **S. Zinger**, P. H. N. de With, "On the Technology Roadmap of Free-Viewpoint 3DTV Receivers", IEEE International Conference on Consumer Electronics (ICCE), pp. 700-701, Las Vegas (USA), January 2011.

L. Do, **S. Zinger**, P. H. N. de With, "Objective quality analysis for free-viewpoint DIBR", International Conference on Image Processing (ICIP), 4 pages, Hong Kong, September 2010.

L. Do, **S. Zinger**, P. H. N. de With, "Conversion of free-viewpoint 3D multi-view video for stereoscopic displays", IEEE International Workshop on Hot Topics in 3D, in conjunction with International Conference on Multimedia & Expo (ICME), 5 pages, Singapore, July 2010.

S. Zinger, L. Do, Y. Gao, P. H. N. de With, "Conversion of free-viewpoint 3DTV signals for stereo displays", 31st Symposium on Information Theory in the Benelux, pp. 89-96, Rotterdam (the Netherlands), May 2010.

G. Petrovic, L. Do, **S. Zinger**, P. H. N. de With, "Virtual-view adaptation for 3D multiview video streaming", IS&T / SPIE Electronic Imaging, Vol. 7524, Stereoscopic Displays and Applications XXI, San Jose (USA), January 2010.

L. Do, **S. Zinger**, P. H. N. de With, "Quality improving techniques for free-viewpoint DIBR", IS&T / SPIE Electronic Imaging, Vol. 7524, Stereoscopic Displays and Applications XXI, 10 pages, San Jose (USA), January 2010.

E. Bondarev, **S. Zinger**, P. H. N. de With, "Performance-efficient architecture for free-viewpoint 3DTV receiver", Proceedings of the 28th International Conference on Consumer Electronics (ICCE), pp.65-66, Las Vegas (USA), January 2010.

S. Zinger, L. Do, D. Ruijters, P. H. N. de With, "IGLANCE: interactive free viewpoint for 3D TV", Proceedings of the 3D Stereo Media conference, 4 pages, Liege (Belgium), December 2009.

G. Petrovic, A. Kadermohideen Shahulhameed, **S. Zinger**, P. H. N. de With, "Region-based all-in-focus light field rendering", Proceedings of the 16th International Conference on Image Processing (ICIP), pp. 549-552, Cairo (Egipt), November 2009.

R. M. H. Besseling, **S. Zinger**, H. Wijkstra, A. J. M. Hendrikx, P. A. J. Hilbers, M. Mischi, "Speckle-initialized dynamic segmentation of the prostate", Proceedings of the 31st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS), pp. 6352-6355, Minneapolis (USA), September 2009.

P. H. N. de With, **S. Zinger**, "Free-viewpoint rendering algorithm for 3D TV", Proceedings of the 2nd International Workshop of Advances in Communication, pp. 19-23, Boppard (Germany), May 2009.

D. Ruijters, **S. Zinger**, "IGLANCE: transmission to medical high definition autostereoscopic displays", Proceedings of 3DTV Conference: The True Vision - Capture, Transmission and Display of 3D Video, 4 pages, Potsdam (Germany), May 2009.

L. Do, **S. Zinger**, Y. Morvan, P. H. N. de With, "Quality improving techniques in DIBR for free-viewpoint video", Proceedings of 3DTV Conference: The True Vision - Capture, Transmission and Display of 3D Video, 4 pages, Potsdam (Germany), May 2009.

S. Zinger, J. Delabrouille, M. Roux, H. Maître, "CMB anisotropies interpolation", Proceedings of International Conference on Imaging Theory and Applications (IMAGAPP), pp. 155-158, Lisbon (Portugal), February 2009.

S. Zinger, D. Ruijters, P. H. N. de With, "iGLANCE project: free-viewpoint 3D video", Proceedings of the 17th International Conference on Computer Graphics, Visualization and Computer Vision (WSCG), 4 pages, Plzen (Czech Republic), February 2009.

S. Zinger, J. Nerbonne, L. Schomaker, "Text-image alignment for historical handwritten documents", Proceedings of SPIE, IS&T / SPIE 21st Annual Symposium on Electronic Imaging, Vol. 7247, Document Recognition and Retrieval XVI, 8 pages, San Jose (USA), January 2009.

S. Zinger, J. Nerbonne, L.R.B. Schomaker, H. van Schie, "Script Analysis Tools for the Cultural Heritage: text line matching for historical handwritten document retrieval" , SIREN 2007, Scientific Information and communication technology Research Event Netherlands, p. 49, Delft (the Netherlands), October 2007.

S. Zinger, J. Nerbonne, L. Schomaker, H. van Schie, "Content-based text line comparison for historical document retrieval", Computational Phonology workshop, Recent Advances in Natural Language Processing conference, RANLP-2007, pp. 79-84, Borovets (Bulgaria), September 2007.

S. Zinger, J. Nerbonne, L.R.B. Schomaker, H. van Schie, "Script Analysis Tools for the Cultural Heritage: statistics on queries and line matching", SIREN 2006, Scientific Information and communication technology Research Event Netherlands, p. 91, Utrecht (the Netherlands), October 2006.

G. Grefenstette, F. Debili, C. Fluhr, **S. Zinger**, "Exploiting text for extracting image processing resources", Language Resources and Evaluation conference, LREC 2006, 4 pages, Genoa (Italy), May 2006.

S. Zinger, C. Millet, B. Mathieu, G. Grefenstette, P. Hède, P.-A. Moëllic, "Clustering and semantically filtering web images to create a large-scale image ontology", Proceedings of SPIE, IS&T / SPIE 18th Annual Symposium Electronic Imaging, Vol. 6061, Internet Imaging VII, pp. 89-97, San Jose (USA), January 2006.

S. Zinger, C. Millet, B. Mathieu, G. Grefenstette, P. Hède, P.-A. Moëllic, "Extracting an Ontology of Portrayable Objects from Wordnet", MUSCLE / ImageCLEF workshop on Image and Video retrieval evaluation, pp. 17-23, Vienna (Austria), September 2005.

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