

GLORIA MENEGAZ



CONTACT INFORMATION

PROFESSIONAL

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CAREER

- Since Oct. 2007 **Associate Professor**, Dept. of Computer Science, Faculty of Mathematical, Physical and Natural Sciences, University of Verona, Italy.
- 03/2004-02/2008 **Adjunct Professor**, Department of Information Engineering, School of Engineering, University of Siena, Italy. Funding for a professorship (research and teaching) from the Italian Ministry for University and Research (MIUR, DM 20/03/2003 n. 501).
- 12/2002-2/2004 **Assistant Professor (*Maître Assistante*)**, Dept. of Computer Science, Faculty of Sciences, University of Fribourg, Switzerland.
- 10/2000-10/2002 **Research Associate**, Audiovisual Communications Laboratory (LCAV), School of Computer and Communication Sciences (I&C), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland.
- 5/2000-9/2000 **Post-doctoral fellow**, Biomedical Image Processing Group (BIG), School of Engineering Sciences and Techniques (STI-SMT), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland.
- 10/1995-07/2000 **Research assistant and PhD student**, Signal Processing Institute (ITS), School of Engineering Sciences and Techniques (STI), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland.
- 9/1995-9/1996 **Research associate**, CEFRIEL-Polytechnical University of Milan, Italy.
- 9/1993-7/1994 **Research assistant**, Department of Physics, Polytechnical University of Milan, Italy.

QUALIFICATIONS

Qualification as **Qualifiée Professeur des Universits** in Section 27 (Informatique), 07/02/2008

Qualified as *Maître des Conférences* in Sections

61 - *Génie informatique, automatique et traitement du signal* (02/2005)

27 - *Informatique* (01/2003 and 02/2007)

Qualified as Advanced researcher (CR1) at CNRS

French Scientific Research Council (CNRS) Section Signal Processing,

Section Computer Science and Automatic Systems (2007)

EDUCATION

- 7/2000 **PhD (Docteur ès Sciences Techniques)**, Signal Processing Institute (ITS), School of Engineering Sciences and Techniques (STI), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland.
Advisor : Prof. Murat Kunt.
Thesis title : “Model-based coding of multi-dimensional data with applications to Medical Imaging”.
- 9/1994–7/1995 **MSc (post-grade Master) in Information Technology**, CEFRIEL (Research and Education Center in Information Technology), Polytechnical University of Milan , Italy. Research project : low bit-rate coding of speech signals by waveform interpolation techniques.
Thesis title : “A Prototype Waveform Interpolation low-bit-rate speech codec”.
- 7/1993–6/1994 **Research assistant** at the Department of Physics of the Polytechnical University of Milan, Italy.
- 12/1993 **Habilitation for performing the Engineering profession**, according to the Italian law.
- 7/1993 **MSc in Electrical Engineering**, Department of Physics, Polytechnical University of Milan, Italy, with full marks. Specialization in Microelectronics and Optoelectronics.
Title : “Design and characterization of single photon avalanche diodes for time resolved photoluminescence”.

POST-GRADE COURSES

- 2/1998 **Wavelets and Applications**, EPFL, Lausanne, Prof. Martin Vetterli.
- 9/1994–7/1995 **Network management, Numerical Transmission Systems, Digital Signal Processing**, within the post-grade Master course in Information Technology, CEFRIEL-Politecnico di Milano center in Milan, Italy.

ACADEMIC ACTIVITY ABROAD

- Jan. 2007 : **Invited Professor**, UMR CNRS 6168, Ecole Supérieur d’Ingénieurs de Luminy (ESIL), Université de la Méditerranée Aix Marseille II, Marseille, France.
- July 2005 : **Invited Professor**, Systems and Information Engineering Laboratory, UMR CNRS 6168, Ecole Supérieur d’Ingénieurs de Luminy (ESIL), Université de la Méditerranée Aix Marseille II, Marseille, France.

PROFESSIONAL ACTIVITY

EDITORIAL ACTIVITIES

Guest Editor	Special Issue of the IEEE/OSA Journal of Display Technology on Medical Displays, <i>submission deadline Dec. 30, 2007</i>
Associate Editor	The EURASIP Journal of Applied Signal Processing
Editor	<i>Special Issue on Image Perception</i>
Reviewer	IEEE Trans. on Image Processing IEEE Trans. on Medical Imaging IEEE Transactions on Information Technology in BioMedicine International Journal of Biomedical Imaging Brain Research Bulletin Elsevier Neurocomputing Signal Processing Journal EE Proceedings - Circuits, Devices and Systems Computer Methods and Programs in Biomedicine, Elsevier Journal of Electronic Imaging IEEE Trans. on Circuits and Systems for Video Technology Systems Man and Cybernetics

Program Committees

MICCAI Medical Image Computing and Computer Aided Intervention, depuis 2006

IEEE Image and Multidimensional Signal Processing (IMDSP), depuis 2005

European Signal Processing Conference (EUSIPCO), depuis 2005

IEEE International Conference on Image Processing (ICIP), depuis 2003

IEEE International Workshop on Multimedia Signal Processing (MMSP), Sept. 29–Oct. 4, Siena, Italy

Workshop and Special Issue on Generative-Model Based Vision (GMBV 2004), Washington DC, USA June 2004

International Joint Conference on e-business and telecommunication networks (ICETE-SIGMAP) depuis 2006. Co-sponsorship IEEE System, Man and Cybernetics Society

International Conference on Signal Processing and Multimedia Applications (SIGMAP), depuis 2006

Chair FOR THE SECTION

Biomedical Image Processing European Signal Processing Conference (EUSIPCO 2006), Florence, Italy, Sept. 1-4, 2006

CONSULTANT FOR THE EUROPEAN COMMISSION

Independent Expert As **panel member** and *rapporteur* appointed by the Directorate General for Research (DG-Research) of the European Commission for the evaluation of New and Emerging Science and Technology (FP6-NEST) and European Research Council (FP7-ERC) proposals.

Reviewer Appointed by the Directorate General for Information Society and Media (DG-INFOS) FP6 and FP7.

Independent Expert Appointed by the Directorate General for Information Society and Media (DG-INFOS), of the European Commission for the evaluation of FP6 and FP7 Information and Communication Technologies (ICT) proposals for Integrated Projects (IP), Networks of Excellence (NoE) and Single Target Research Projects (STREPS).

AWARDS

2004 Selected for *Who's Who in Medicine and Healthcare*, 2004-2005.

FUNDING

- 2004-2007 Professorship grant from the Italian Ministry of Education, University and Research (MIUR, D.M. n.96 del 23.04.2001). The funding covers a period of three years (from March 1st 2004 to Feb. 28, 2007) and includes a research fund.
Title : "Perceptual image modeling : bridging vision"
Author : Gloria Menegaz
- 2002-2005 Swiss National Science Foundation (SNF). Grant number 21-067012.01.
Title : "Perceptual modeling of color textures"
Authors : Gloria Menegaz and Sabine Suesstrunk
- 2001-2003 EPFL internal research grant. The grants covers the period 2000-2002 and funds the post-doc position at the Audiovisual Communications Lab. of EPFL.
Title : "Image models built on joint texture and color characterization for natural images in digital imaging systems"
Authors : Gloria Menegaz (principal investigator) and Sabine Suesstrunk.

TEACHING

- a.y. 2007-2008 "System architecture (Lab.)" and "Operative Systems (Lab.)", 24h and 48h, respectively, Dept. of Computer Science, University of Verona.
- Since 2004 "Telecommunications for the Multimedia", Master course in Telecommunications and Computer Science, 42 hours, Dept. of Information Engineering, School of Engineering, University of Siena, Italy.
- 2003-2004 "Advanced Image Processing", Master course, 42 hours, Dept. of Computer Science, University of Fribourg, Switzerland.
- 2002-2003 "Image Processing", Master course, 42 hours, Department of Computer Science, University of Fribourg, Switzerland.
- 2001-2002 Teaching assistant for the course of "Color Imaging" (under-grad), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland
- 2000-2001 Teaching assistant for the course of "Digital Photography" (under-grad), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland.
- 1996-now Co-supervision of three doctoral students (one at EPFL, two at the University of Siena), ten Master students, and many under-grad students.

SHORT COURSES

- 12/2007 *Image quality assessment*, 4h frontales, Facult des Sciences, filire Informatique, Universit de Milan, Milano Bicocca, Italie.
- 02/2007 : "Color imaging", CNRS-UMR 6168, Master course, 4 hours, Université de la Méditerranée Aix Marseille II, France.
- 10/2006 : "Color vision and applications", CNRS-UMR 6168, Master course, 8 hours, Université de la Méditerranée Aix Marseille II, France.
- 11/2005 : "Color categorization and naming", CNRS-UMR 6168, Master course, 4 hours, Université de la Méditerranée Aix Marseille II, France.
- July 12-15, 2004 "Perceptual Image Processing", Doctoral School course, 16 hours, Dept. of Information Engineering, School of Engineering, University of Siena, Italy.

INVITED TALKS

- 01/2007 *Image perception : vision models for the multimedia*, Faculty of Mathematical, Physical and Natural Sciences, University of Verona, Italy.
- 07/2005 *Color vision : investigating higher order color mechanisms, and Wavelet-based texture modeling*, Systems and Information Engineering Laboratory, UMR-CNRS 6168, Marseille, France.
- 12/2003 *Image models and visual perception : the case of textures*, Department of General Psychology, University of Padova, Italy.
- 9/2002 *Color Contrast Detection in Spatial Chromatic Noise*, Institute of Neuroinformatics, University of Zurich, Winterthurerstr. 190, 8057 Zurich, Switzerland.
- 7/2002 *Modeling 2D+1 Textures*, Coherent States, Wavelets and Applications, Université catholique de Louvain, Louvain-la-Neuve, Belgium.
- 5/2002 *Computational Vision : Image Models and Neural Representation*, Institut National de la Santé et de la Recherche Médicale (INSERM) Cerveau et Vision, 18 avenue du Doyen Lepine, 69675 Bron Cedex, France.
- 5/2002 *Model-based Image Processing*, Universität Koblenz-Landau, Koblenz, Germany.
- 1/2002 *Computational Vision : Relations between Image Models and Neural Representation*, Department of Neurological and Vision Sciences, University of Verona, Italy.
- 12/2001 *Some issues in medical imaging : analysis and compression*, Universitaet Regensburg Augenklinik, D-93042 Regensburg, Germany.
- 7/2001 *Model-based coding : JPEG2000 and beyond*, Dept. of Computational Science and Artificial Intelligence (DECSAI), University of Granada, Spain.
- 6/2000 *Wavelet-based Coding : JPEG2000 and beyond*, CEFRIEL (Research and Education Center in Information Technology) in Milan, Italy.
- 5/2000 *Texture modeling for coding applications*, Annual meeting of the "Group de contact FNRS Ondelettes et applications", Louvain la Neuve, Belgium.

COLLABORATIONS

- Prof. Guang Zhong Yang Chair in Medical Image Computing, , Imperial College, London. Subject : model-based coding of stereo endoscopy video sequences, medical image perception.
- Prof. Jean Sequeira Director of the LXAO-LSIS group (UMR CNRS 6168), Université de la Méditerranée Aix Marseille II, France. Subjects : color categorization and naming, color perception, medical imaging.
- Prof. J-Ph. Thiran Signal Processing Institute (ITS), School of Engineering Sciences and Techniques, Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland.
Subject : Image segmentation, multimodal image registration, segmentation, computer-assisted surgery.
- Dr. Kenneth Knoblauch (INSERM), National Research Center on Health and Medicine, Brain and Vision division, France.
Research domain : Color vision and perception, psychophysics.

ORGANIZATIONS - MEMBERSHIPS

- IEEE : The Institute of Electrical and Electronics Engineers, valued member since 1995
- IEEE-WIE IEEE Women in Engineering, since 2000
- IS&T : The Society for Imaging Science and Technology, since 2000
- ICVS : International Color Vision Society, since 2002
- MIPS : Medical Image Perception Society, since 2004
- DVB : Digital Video Broadcasting, since 2004
- CNIT : National Inter-University Consortium for Telecommunications, since 2004
- SPIE : The International Society for Optical Engineering, since 2006
- OSA : Optical Society of America, since 01/2007

LANGUAGES

- Italian Mother tongue
- English Fluent oral and written
- French Fluent oral and written
- Spanish Basic

TECHNICAL SKILLS

Platforms : SUN, Silicon Graphics
Operating systems : UNIX, MS/DOS, Linux, Windows
Programming languages : C, C++, IDL, Matlab, Mathematica,
Pascal, Fortran, Basic
Word processing : Word, L^AT_EX, PowerPoint, Showcase
Platform for Psychophysical testing : WinVis toolbox for Matlab

PERSONAL DATA

Born March 3rd 1967 in Verbania, Italy, Italian, single.

DIFFERENT INTERESTS

Reading Psychology, romances, biographies
Music Classic, blues, rock
Photography Analogic and digital

PUBLICATIONS

BOOKS AND CHAPTERS

1. G. Menegaz, "Trends in Medical Image Coding", Document and Image Compression, M. Barni and F. Bartolini, CRC Press, Taylor&Fracis Group, 6000 Broken Sound Parkway NW, Suite 300, Boca Raton, FL 33487-2742, 2006.
2. G. Menegaz, "Model-based 3-D encoding/2-D decoding of medical imaging data", Medical Imaging Systems, World Scientific Publishing Co., Inc. 1060 Main Street, Suite 202 River Edge, NJ 07661, USA, 2005.

INTERNATIONAL JOURNALS

1. G. Menegaz, G.-Z. Yang, "Perceptual imaging", EDITORIAL, Eurasip Journal of Advances in Signal Processing, Special Issue on Image Perception, Volume 2007 (2007), Article ID 39068, 3 pages
2. G. Menegaz, A. Le Troter, J. Sequeira, J.M. Boi, "A discrete model for color naming", Special Issue on Image Perception of the EURASIP Journal of Advances in Signal Processing, Volume 2007 (2007), Article ID 29125, 10 pages
3. D. Prattichizzo, M. Barni, H.Z. Tan, G. Menegaz, A. Formaglio, "Perceptual Issues in Haptic Digital Watermarking", IEEE Multimedia Magazine, *in press*.
4. G. Menegaz, "Trends in Medical Image Compression", Current Medical Imaging Reviews, Volume 2, Number 2, May 2006, pp. 165–185.
5. G. Monaci, G. Menegaz, S. Suesstrunk and K. Knoblauch, "Color Contrast Detection in Spatial Chromatic Noise", Visual Neuroscience, Vol. 21, n. 3, May/June 2004.
6. G. Menegaz and J.-Ph. Thiran, "3D Encoding/2D Decoding of Medical Data", IEEE Transactions on Medical Imaging, Vol. 22, n. 3, pp. 424–440, March 2003.
7. S. Valaey, G. Menegaz, F. Ziliani and J. Reichel, "Modeling of texture movies for video coding", Image and Vision Computing, Special Issue on Generative Model-based Vision, Vol. 21, No. 1, pp. 49–59, Jan. 2003.
8. G. Menegaz and J.-Ph. Thiran, "Lossy to lossless object-based Coding of 3D MRI data", IEEE Transactions on Image Processing, Vol. 11, No. 9, pp. 1053–1061, Sept. 2002.
9. J. Reichel, G. Menegaz, M. Nadenau and M. Kunt, "Integer Wavelet Transform for Embedded Lossy to Lossless Image Compression", IEEE Transactions on Image Processing, Vol. 10, No. 3, pp. 383–392, March 2001.

ABSTRACTS IN MEDICAL JOURNALS

1. G. Bartoli, G. Menegaz, S. Dragoni, G. Di Stolfo, S. Sicuro, M. Lisi, S. Forconi, T. Gori, "Sviluppo di un software, interamente automatico, a basso costo, per lo studio della vasodilatazione flusso-mediata", Giornale Italiano di Cardiologia, Journal of Cardiovascular Medicine, 2006 ; 7(1) : 316.

2. G. Bartoli and G. Menegaz and S. Dragoni and M. Lisi and J. Parker and S. Forconi and T. Gori, "Automatic investigation of flow-mediated dilation : a spline-based approach", *Journal of Internal and Emergency Medicine*, 2006, 1(2) : 84-5S.
3. G. Bartoli and G. Menegaz and S. Dragoni and M. Lisi and J. Parker and S. Forconi and T. Gori, "Lo studio della funzione endoteliale : presentazione di un nuovo software, interamente automatizzato, a basso costo, per la misurazione della vasodilatazione flusso mediata", *Minerva Cardioangiologica*, 2006 ; 54 (1) : 303-4.

ON-GOING SUBMISSIONS TO INTERNATIONAL JOURNALS

1. G. Bartoli, G. Menegaz, M. Lisi, S. Dragoni, T. Gori, "Spline based analysis of Flow Mediated Dilation and Intima-Media Thickness", *IEEE Trans. on Biomedical Engineering* (*submitted in June 2008*).
2. G. Bartoli, G. Menegaz, M. Lisi, S. Dragoni, T. Gori, "Computerized Analysis of Vascular Flow-Mediated Dilation : a Novel Accurate, Rapid, User-Friendly and Low-Cost Software Suitable for Large Trials", *Journal of Hypertension* (*submitted in Nov. 2007*).

INTERNATIONAL CONFERENCES

1. G. Menegaz, G. Bartoli, A. Le Troter, J.M. Boi, J. Sequeira, "Topology preserving resampling of the OSA-UCS", *European Conference on Visual Perception*, 27-31 August 2007, Arezzo, Italy.
2. G. Menegaz, A. Le Troter, J. Sequeira, J.M. Boi, "Semantics driven resampling of the OSA-UCS", *2007 Computational Color Imaging Workshop, International Conference on Image Analysis and Processing (ICIAP)*, Modena, Italy, on September 14, 2007.
3. G. Menegaz, G. Bartoli, G.Z. Yang, "Perceptual model-based coding of endoscopic stereo sequences", *SPIE Medical Imaging*, Feb. 17-22, 2007, San Diego, California, USA.
4. G. Menegaz, A. Franceschetti, A. Mecocci, "Fully automatic perceptual modeling of near regular textures", *SPIE Human Vision and Electronic Imaging*, San Jose, CA, Jan. 28-Feb. 1st, 2007.
5. G. Bartoli, G. Menegaz, T. Gori, S. Dragoni, "SpLiNeS : Automatic Analysis of Ecographic Movies in Flow-Mediated Dilation", *SPIE Medical Imaging*, Feb. 17-22, 2007, San Diego, California, USA.
6. A. D'Angelo, G. Menegaz, M. Barni, "Perceptual quality evaluation of geometric distortions in images", *SPIE Human Vision and Electronic Imaging*, San Jose, CA, Jan. 28-Feb. 1st, 2007.
7. G. Bartoli, G. Menegaz, T. Gori, S. Dragoni, "A novel automatic low-cost method for analysing vessels dilation", *67th National Congress of the Italian Society of Cardiology*, Rome, December 16-19, 2006.
8. G. Bartoli, G. Menegaz, T. Gori, S. Dragoni, "Un nuovo metodo, interamente automatizzato, a basso costo, per l'analisi della vasodilatazione flusso-mediata", *Congress of the Italian Society of Internal Medicine*, 2006.

9. S. Belloni, A. Formaglio, G. Menegaz, D. Prattichizzo, M. Barni, "Perceptibility of digital watermarking in haptically enabled 3D meshes", EuroHaptics 2006, Paris, France, July 3-6, 2006.
10. G. Cancelli, M. Barni, G. Menegaz, "MPSteg : hiding a message in the Matching Pursuit domain", SPIE Human Vision and Electronic Imaging, San Jose, CA, Jan. 15-19, 2006.
11. S. Belloni, A. Formaglio, G. Menegaz, H.Z. Tan, D. Prattichizzo, M. Barni, "Is haptic watermarking worth it?", SPIE Human Vision and Electronic Imaging, San Jose, CA, Jan. 15-19, 2006.
12. G. Menegaz, R. Zambon, "Towards a semantic-driven metric for image quality", International Conference on Image Processing (ICIP), Genova, Italy, Sept. 11-14, 2005.
13. R. Costantini, G. Menegaz, S. Suesstrunk, "A measure for spatial dependency in natural stochastic textures", International Conference on Image Processing, Singapore, Oct. 24-27, 2004.
14. G. Monaci, G. Menegaz, S. Suesstrunk and K. Knoblauch, "Spectral Bandwidths for the Detection of Color within Random Color Textures", supplement to Perception Vol.32, pp. 146, 26th European Conference on Visual Perception, Paris, France, Sept. 1-5, 2003.
15. G. Monaci, G. Menegaz, S. Suesstrunk and K. Knoblauch, "Color Contrast Detection in Spatial Chromatic Noise", 17th Symposium of the International Color Vision Society, Seattle, US, July 11-15, 2003.
16. G. Menegaz and S. Valaëys, "Modeling of 2D+1 textures", Proceedings of the *Group₂₄* XIVV Int. Colloquium on Group Theoretical Methods in Physics, Coherent States, Wavelets and Applications, Paris, France, July 15-20, 2002.
17. S. Valaëys, G. Menegaz, F. Ziliani and J. Reichel, "Modeling of texture movies for video coding", Proc. of the 2002 European Conference on Computer Vision (ECCV), First International Workshop on Generative-Model-Based Vision (GMBV-2002), May 28-June 2, 2002 Copenhagen, Denmark.
18. G. Menegaz and L. Grewe, "3D/2D object-based coding of 3D MRI data", Proc. of the 2002 International Conference on Image Processing (ICIP-2002), Vol. 1 , pp. 181-184, Rochester, New York, Sept. 22-25, 2002.
19. G. Menegaz, "DWT-based non-parametric texture modeling", Proc. of the 2001 International Conference on Image Processing (ICIP-2001), Vol. 1, pp. 173-176, Thessaloniki, Greece, October 7-10, 2001.
20. G. Menegaz, A. Rivoldini and J.-Ph. Thiran, "Continuous Directional Dyadic Wavelets as Texture Descriptors", Proc. of SPIE 45th Annual Meeting, Optical Science and Technology, Mathematical Imaging, Wavelet Applications in Signal and Image Processing VIII, Vol. 4119, pp. 263-273, San Diego, California (USA), July 30-Aug 4, 2000.
21. G. Menegaz, L. Grewe and J-Ph. Thiran, "Multirate Coding of 3D Medical Data", 2000 International Conference on Image Processing (ICIP2000), Sept 10 - 13, 2000, Vancouver, BC, Canada.
22. J. Reichel, G. Menegaz and M. Nadenau, "Integer Wavelet Decomposition for Lossy Image Compression", Proc. of SPIE, Wavelet Applications in Signal and Image Processing VII (SPIE-99), Vol. 3808, pp. 257-268, Denver, Colorado, July 18-23, 1999.

23. G. Menegaz, L. Grewe, A. Lozano and J-Ph. Thiran, ‘Application Oriented Wavelet-based Coding of Volumetric Medical Data’, The World Congress on the Internet in Medicine (MEDNET’-99), Heidelberg, Germany, Sept. 18–21, 1999.
24. G. Menegaz, V. Vaerman and J-Ph. Thiran, “Object-based Coding of Volumetric Medical Data”, Proc. of the International Conference on Image Processing (ICIP-99), Vol. 3, pp. 900-924, Kobe, Japan, October 25–28, 1999.
25. V. Vaerman, G. Menegaz and J-Ph. Thiran, “A Parametric Hybrid Model used for Multidimensional Object Representation”, Proc. of the International Conference on Image Processing (ICIP-99), Vol. 1, pp. 163–167, Kobe, Japan, October 25–28, 1999.
26. G. Menegaz, K. Woerle, and J.-Ph. Thiran, “Telematic Applications in Ophthalmology : transfer of Angiography and Other Series”, Proc. of the World Congress on Biomedical Communication, Amsterdam, May 1999.
27. G. Menegaz, V. Vaerman and J-Ph. Thiran, “Model-based Compression of Multidimensional Medical data”, Proc. of the Wavelet and Applications Workshop (WAW), Ascona, Switzerland, Sept. 28–Oct. 2, 1998.
28. G. Menegaz and R. Lancini, “Semantic Segmentation of Angiographic Images”, Proc. of Int. Conf. of IEEE Engineering in Medicine and Biology Society (EMBS-96), Amsterdam, The Netherlands, Vol. 2, pp. 670–671, Oct. 31–Nov. 3, 1996.
29. G. Menegaz and M. Mazzoleni, “A Prototype Waveform Interpolation low bit-rate Speech Codec”, Proc. of the European Signal and Image Processing Conference (EUSIPCO-96), Trieste, Italy, Sept. 1996.

CONTRIBUTIONS TO INTERNATIONAL STANDARDS

1. T. Ebrahimi, G. Menegaz, J. Reichel, M. Nadenau and E. Durucan, “Subband-based image compression”, Technical Report JPEG2000, *EPFL Proposal for JPEG2000*, ISO/IEC JTC1/SC29/WG01/N654, Signal Processing Institute (ITS), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland, Nov. 10, 1997.
2. G. Menegaz and T. Ebrahimi, “Comparison between JPEG and MPEG4 for Still Image Compression”, Technical Report JPEG-2000, ISO/IEC JTC1/SC29 WG01/N501, Signal Processing Institute (ITS), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland, 1997.
3. G. Menegaz and T. Ebrahimi, “Preliminary Results for JPEG-2000”, Technical Report JPEG-2000, ISO/IEC JTC1/SC29/WG01/N560, Signal Processing Institute (ITS), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland, 1997.
4. P. Schmid and G. Menegaz, “Results of CE X1 for Efficient Coding of Homogeneous Textures”, Technical Report MPEG4, ISO/IEC JTC1/SC29/WG11/M1775, Signal Processing Institute (ITS), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland, 1997.
5. P. Schmid and G. Menegaz, “Results of CE Z1 for efficient coding of textures”, Technical Report, MPEG4, ISO/IEC JTC1/SC29/WG11/M1915, Signal Processing Institute (ITS), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland, 1997.

THESIS AND RESEARCH REPORTS

1. G. Menegaz, “Model-based Coding of Multi-dimensional data with applications to Medical Imaging”, PhD Thesis 2175, May 2000, Signal Processing Institute (ITS), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland.
2. G. Menegaz and M. Mazzoleni, “PWI : A Prototype Waveform Interpolation low bit-rate Speech Codec”, Report for the Master In Information Technology, July 1995, CEFRIEL, Milano, Italy.
3. G. Menegaz, “Project and Characterization of Single Photon Avalanche Diodes Optimized for time-resolved photoluminescence”, Diploma Report, Polytechnical University of Milan, Italy, July 1993.
4. V. Vaerman, C. de Solà Fàbregas and G. Menegaz, “The Hyperquadrics : an Efficient Parametric Surface Representation”, Internal Report LTS 97.10, Signal Processing Institute (ITS), Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland, November 1997.