

## LIST OF PUBLICATIONS

Thierry Pun.  
October 5, 2018

1. Refereed journals, book chapters, special issues
2. Patent applications
3. International conferences with refereed full length articles, invited talks, full demonstrations
4. Other conferences
5. Other journals
6. Miscellaneous
7. Public events
8. Media coverage
9. Course notes

### 1. Refereed journals, book chapters, special issues

1. M. Muszynski, Leimin Tian, Catherine Lai, J. D. Moore, T. Kostoulas, P. Lombardo, T. Pun, G. Chanel, "Recognizing induced emotions of movie audiences from multimodal information", IEEE Trans. on Affective Computing, rev., Feb. 2018.
2. Chen Wang, T. Pun, G. Chanel, "A comparative survey of methods for remote heart rate detection from frontal face videos", Frontiers in Bioengineering and Biotechnology, section Bionics and Biomimetics, Special Topic "Applications of Visual Analysis of Human Behavior", Gholamreza Anbarjafari, Cagri Ozcinar, Hasan Demirel, Eds., 2018. (Front. Bioeng. Biotechnol., 01 May 2018 <https://doi.org/10.3389/fbioe.2018.00033> )
3. M. Muszynski, T. Kostoulas, P. Lombardo, T. Pun, G. Chanel, "Aesthetic highlight detection in movies based on synchronization of spectators' reactions", ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM), 14, 3, July 2018.
4. S. Cloix, T. Pun, D. Hasler, "2D point characterization for 3D keypoint detection using light field images", Journal of Real-Time Image Processing (JRTIP), Springer. Subm. 5 April 2017.
5. T. Kostoulas, G. Chanel, M. Muszynski, P. Lombardo, T. Pun, "Films, affective computing and aesthetic experience: Identifying emotional and aesthetic highlights from multimodal signals in a social setting", Human-Media Interaction, Specialty section, Frontiers in ICT, 2017, Front. ICT 4:11. doi: 10.3389/fict.2017.00011
6. M. Soleymani, F. Villaro-Dixon, T. Pun, G. Chanel, "Toolbox for Emotional feATure extraction from Physiological signals (TEAP)", Frontiers in ICT, section Human-Media Interaction, Vol. 4, Issue 1, 2017. doi: 10.3389/fict.2017.00001.
7. J. Gomez, G. Bologna, C. Ferrin, E. Correa, P. Vele, T. Pun, "Extending Interaction in Visual Sensory Substitution Devices with Text Recognition and Tactile Augmented Reality", IEEE Trans. on Haptics, subm. Dec. 2015.
8. S. Cloix, G. Bologna, V. Weiss, T. Pun, D. Hasler, "Low-power depth-based descending stairs detection for smart assistive devices", Eurasip Journal on Image and Video Processing, 2016, 2016:33. DOI 10.1186/s13640-016-0133-6. Direct link: <http://rdcu.be/wGeS>
9. J. Gomez, G. Bologna, T. Pun, "Extending interaction in visual sensory substitution devices with text recognition and tactile augmented reality", Journal of Assistive Technologies, Submitted, 2014.
10. J. D. Gomez, G. Bologna, T. Pun, "A visual world to be heard: Touch and audio trajectory playback as non-visual cueing method to increase spatial awareness of unsighted individuals", Springer Journal of Interaction Science, Submitted, March 2014.
11. M. Soleymani, T. Pun and A. Nijholt, "Best of Affective Computing and Intelligent Interaction 2013 in Multimodal Interactions", Special Issue Guest Editorial, Journal on Multimodal User Interfaces, Springer, July 2014. DOI 10.1007/s12193-014-0163-2.
12. J. Gomez, G. Bologna, T. Pun, "See CoLOr: An extended sensory substitution device for the visually impaired", J. of Assistive Technologies, Vol. 8, No. 2, 2014, 77-94. DOI: 10.1108/JAT-08-2013-0025
13. M. Soleymani, M. Larson, T. Pun, A. Hanjalic, *Corpus development for evaluation of affective video indexing*, IEEE Trans. on Multimedia, 16, 4, June 2014.

14. J. D. Gomez, G. Bologna, T. Pun, "Registering color and range images", *EURASIP Journal on Image and Video Processing*, 2013:41, June 2013. Doi:10.1186/1687-5281-2013-41, <http://jivp.eurasipjournals.com/content/2013/1/41>.
15. C. Chenes, G. Chanel, M. Soleymani, T. Pun, "Highlights detection in movie scenes through inter-users physiological linkage", in: *Social Media Retrieval*, N. Ramzan, R. van Zwol, Jong-Seok Lee, K. Clver, Xian-Sheng Hua, Eds., Springer, Computer Communications and Networks Series, 2013.
16. J.-M. Pignat, O. Koval, D. Van De Ville, S. Voloshynovskiy, C. Michel, T. Pun, "The impact of denoising on independent component analysis of functional magnetic resonance imaging data", *Journal of Neuroscience Methods*, 2012 (Online Dec. 19, 2012). <http://dx.doi.org/10.1016/j.jneumeth.2012.10.011>
17. S. Koelstra, C. Mhl, M. Soleymani, Jong-Seok Lee, A. Yazdani, T. Ebrahimi, T. Pun, A. Nijholt, I. Patras, *DEAP: A database for emotion analysis using physiological signals*, *IEEE Trans. on Affective Computing*, Special Issue on Naturalistic Affect Resources for System Building and Evaluation, B. Schuller, L. Devillers, R. Cowie, E. Douglas-Cowie, A. Batliner, Guest Editors, Vol. 3, No. 1, Jan. - March 2012, 18-31.
18. M. Soleymani, M. Pantic, T. Pun, *Multi-modal emotion recognition in response to videos*, *IEEE Trans. on Affective Computing*, Vol. 3, No. 2, April-June 2012, 211-223. Digital Object Identifier: 10.1109/T-AFFC.2011.37 This article was chosen as one of The Most Influential Articles in IEEE - Transactions on Affective Computing, and presented at ACII 2015, Special Session on The Most Influential Articles in IEEE - TAC, Sept. 21-24, 2015, Xian, China (invited). Together with a poster in a special session.
19. M. Soleymani, J. Lichtenauer, T. Pun, M. Pantic, *A multi-modal database for affect recognition and implicit tagging*, *IEEE Trans. on Affective Computing*, Special Issue on Naturalistic Affect Resources for System Building and Evaluation, B. Schuller, L. Devillers, R. Cowie, E. Douglas-Cowie, A. Batliner, Guest Editors, Vol. 3, No. 1, Jan. - March 2012, 42-55.
20. G. Chanel, C. Rebetez, M. Betrancourt, T. Pun, *Emotion assessment from physiological signals for adaptation of games difficulty*, *IEEE Trans. on Systems, Man, and Cybernetics - Part A: Systems and Humans*, Vol. 41, No. 6, November 2011, 1052-1063. DOI: 10.1109/TSMCA.2011.2116000
21. G. Bologna, B. Deville, T. Pun, *Toward global and local perception modules for vision substitution*, *Neurocomputing*, Vol. 74, No. 8, March 2011, 1182-1190. Selected Papers from the 3rd Int. Work-Conference on the Interplay between Natural and Artificial Computation (IWINAC 2009), J.-M. Ferrandez, D. Maravall, J. R. Alvarez-Sanchez, Guest Eds. (Online: doi:10.1016/j.neucom.2010.07.022).
22. R. Rytzar, T. Pun, *EEG source reconstruction using global optimization approaches: Genetic Algorithms versus Simulated Annealing*, *Int. Journal of Tomography and Statistics*, (now *Int. J. of Tomography and Simulation*), Special Issue on Image Processing, Vol. 14 (Special Volume), No. S10, Summer 2010, 84-94.
23. G. Chanel, J. Kierkels, M. Soleymani, T. Pun, *Short-term emotion assessment in a recall paradigm*, *Int. Journal of Human-Computer Studies*, Vol. 67, 2009, 607-627. (Online: doi:10.1016/j.ijhcs.2009.03.005)
24. M. Soleymani, G. Chanel, J. Kierkels, T. Pun, *Affective characterization of movie scenes based on content analysis and physiological changes*, *Int. Journal of Semantic Computing*, Vol. 3, No. 2, 2009, 235-254.
25. B. Deville, G. Bologna, M. Vinckenbosch, T. Pun, *See Color: Seeing colours with an orchestra*, In: *Human Machine Interaction, Research Results of the MMI Program*, Springer LNCS, Lecture Notes in Computer Science, Vol. 5440, Lalanne, D., Kohlas, J., Eds., 2009, 251-279.
26. G. Bologna, B. Deville, T. Pun, *On the use of the auditory pathway to represent image scenes in real-time*, *Neurocomputing*, 72, 2009, 839-849. Electronic publication: 2008, Article DOI: <http://dx.doi.org/10.1016/j.neucom.2008.06.020>
27. S. Kosinov, T. Pun, *Distance-based discriminant analysis method and its applications*, *Pattern Anal. Appl.*, Vol. 11, No. 3-4, 2008, 227-246.
28. S. Voloshynovskiy, O. Koval, R. Villan, F. Beekhof and T. Pun, *Authentication of biometric identification documents via mobile devices*, *SPIE Journal of Electronic Imaging (JEI)*, Special Issue on Biometrics: Advances in Security, Usability and Interoperability, Vol. 17, No. 1, 2008, 011-014. (invited paper)
29. J. E. Vila-Forn, S. Voloshynovskiy, O. Koval, F. Perez-Gonzlez. T. Pun, *Quantization-based methods: additive attacks performance analysis*, *Trans. on Data Hiding and Multimedia Security (DHMS III)*, Springer Lecture Notes on Computer Science, Vol. LNCS 4920, 2008, 70-90.

30. A. Caplier, T. Pun, D. Tzovaras, *Image and Video Processing for Disability*, EURASIP Journal on Image and Video Processing, Special Issue: Image and Video Processing for Disability, Guest Editors: A. Caplier, T. Pun, D. Tzovaras, Volume 2007 (2007), Article ID 54743, doi:10.1155/2007/54743, 2p. (Open Access article). <http://www.hindawi.com/journals/ivp/volume-2007/si.3.html>
31. T. Pun, P. Roth, G. Bologna, K. Moustakas, D. Tzovaras, *Survey: Image and video processing for sight handicapped people*, EURASIP Journal on Image and Video Processing, Special Issue: Image and Video Processing for Disability, Guest Editors: A. Caplier, T. Pun, D. Tzovaras, Volume 2007 (2007), Article ID 25214, 12p. (Open Access article). <http://www.hindawi.com/journals/ivp/volume-2007/si.3.html>
32. G. Bologna, B. Deville, T. Pun, M. Vinckenbosch, *Transforming 3D coloured pixels into musical instrument notes for vision substitution applications*, EURASIP Journal on Image and Video Processing, Special Issue: Image and Video Processing for Disability, Guest Editors: A. Caplier, T. Pun, D. Tzovaras, Volume 2007 (2007), Article ID 76204, 14 p. (Open Access article). <http://www.hindawi.com/journals/ivp/volume-2007/si.3.html>
33. J. Kronegg, G. Chanel, S. Voloshynovskiy, T. Pun, *EEG-based synchronized brain-computer interfaces: a model for optimizing the number of mental tasks*, IEEE Trans. on Neural Systems and Rehabilitation Engineering, Vol. 15, No. 1, March 2007, 50-58.
34. S. Voloshynovskiy, O. Koval, F. Deguillaume, T. Pun, *Quality enhancement of printed-and-scanned images using distributed coding*, Signal Processing, Vol. 87, No. 6, June 2007, 1301-1313.
35. R. Villan, S. Voloshynovskiy, O. Koval, T. Pun, *Multilevel 2D bar codes: towards high capacity storage modules for multimedia security and management*, IEEE Transactions on Information Forensics and Security, Vol. 1, No. 4, Dec. 2006, 405-420.
36. B. Janvier, E. Bruno, S. Marchand-Maillet, T. Pun, *Information-theoretic temporal segmentation of videos and applications: multiscale keyframe selection and transition detection*, MTAP - Multimedia Tools and Applications, Kluwer, Vol. 30, No. 3, Sept. 2006, 273-288.
37. T. I. Alecu, S. Voloshynovskiy, T. Pun, *The Gaussian transform of distributions: definition, computation and application*, IEEE Trans. on Signal Processing, Vol. 54, No. 8, Aug. 2006, 2976-2985.
38. T. Pun, T. I. Alecu, G. Chanel, J. Kronegg, S. Voloshynovskiy, *Brain-computer interaction research at the Computer Vision and Multimedia Laboratory, University of Geneva*, IEEE Trans. Neural Systems and Rehabilitation Engineering, Special Issue on Brain-Computer Interaction, T. M. Vaughan and J. R. Wolpaw, Eds., Vol. 14, No. 2, June 2006, 210-213.
39. O. Koval, S. Voloshynovskiy, J.E. Vila-Forcn, F. Prez-Gonzlez, F. Deguillaume and T. Pun, *Robustness improvement of known-host-state watermarking using host statistics*, Signal Processing, Vol. 86, No. 5, May 2006, 1076-1088.
40. S. Voloshynovskiy, O. Koval, K. Mihcak, T. Pun, *The Edge process model and its application to information hiding capacity analysis*, IEEE Trans. Signal Processing, Vol. 54, No. 5, May 2006, 1813-1825.
41. J.E. Vila-Forcen, S. Voloshynovskiy, O. Koval and T. Pun, *Facial image compression based on structured codebooks in overcomplete domain*, EURASIP Journal on Applied Signal Processing, Special Issue: Frames and overcomplete representations in signal processing, communications, and information theory, Vol. 2006, No. 7, Article ID 69042, 11p.
42. E. Topak, S. Voloshynovskiy, O. Koval, M.K. Mihcak and T. Pun, *Towards geometrically robust data-hiding with structured codebooks*, ACM Multimedia Systems Journal, Special Issue on Multimedia and Security, 11, 2, 2005, 121-132.
43. S. Voloshynovskiy, O. Koval, T. Pun, *Image denoising based on the edge-process model*, Signal Processing, 85, 10, Oct. 2005, 1950-1969.
44. S. Voloshynovskiy, F. Deguillaume, O. Koval and T. Pun, *Information-theoretic data-hiding: Recent achievements and open problems*, International Journal of Image and Graphics, Special Issue on Image Data Hiding, 5, 1, Jan. 2005, 1-31.
45. H. Mller, T. Pun, D. McG. Squire, *Learning from user behavior in image retrieval: application of the market basket analysis*, Int. J. of Comp. Vision, Special Issue on Content-Based Image Retrieval, 56, 1/2, Jan. - Feb. 2004, 65-77.
46. *Signal Processing, Special Issue on: Security of Data Hiding Technologies*, Guest editors: S. Voloshynovskiy, T. Pun, J. Fridrich, F. Prez-Gonzlez, N. Memon, 83, 10, Oct. 2003.

47. F. Deguillaume, S. Voloshynovskiy, T. Pun, *Secure hybrid robust watermarking resistant against tampering and copy-attack*, Signal Processing, Special Issue on: Security of Data Hiding Technologies, S. Voloshynovskiy, T. Pun, J. Fridrich, F. Prez-Gonzlez, N. Memon, Eds., 83, 10, Oct. 2003, 2133-2170.
48. S. Marchand-Maillet, H. Mller, W. Mller, T. Pun, *Was leisten automatische inhaltbasierte Bildsuchsysteme?*, *The reality of automatic content-based image retrieval systems*, In Suchbilder, W. Ernst, S. Heidenreich, and U. Holl Eds., Kulturverlag Kadmos Publ., 2003.
49. H. Mueller, W. Mueller, S. Marchand-Maillet, D. McG. Squire, T. Pun, *A framework for benchmarking in visual information retrieval*, Int. Journal on Multimedia Tools and Applications (Kluwer), Special Issue: Best Papers of the ACM Multimedia 2001 Workshop on Multimedia Information Retrieval, 21, 1, Sept. 2003, 55-73.
50. P. Roth, H. Kamel, L. Petrucci, T. Pun, *A comparison of three nonvisual methods for presenting scientific graphs*, J. of Visual Impairment and Blindness, 96, 6, June 2002, 420-428.
51. W. Mller, S. Marchand-Maillet, H. Mller, D. McG. Squire, T. Pun, *Evaluating image browsers using structured annotation*, JASIS, Journal of the American Society for Information Science and Technology, 52, 11, Sept. 2001, 961-968.
52. S. Voloshynovskiy, S. Pereira, T. Pun, J. Eggers, J. Su, *Attacks on digital watermarks: classification, estimation-based attacks and benchmarks*, Invited Paper, IEEE Communications Magazine, Spec. Issue on: Digital watermarking for copyright protection: a communications perspective, M. Barni, F. Bartolini, I.J. Cox, J. Hernandez, F. Prez-Gonzlez, Guest Eds., August 2001, 39, 8, 118-127.
53. S. Pereira, S. Voloshynovskiy, T. Pun, *Optimal transform domain watermark embedding via linear programming*, Signal Processing, Special Issue: Information Theoretic Issues in Digital Watermarking, V. Cappellini, M. Barni, F. Bartolini, Eds., 81, 6, June 2001, 1251-1260.
54. S. Voloshynovskiy, S. Pereira, V. Iquise, T. Pun, *Attack modelling: Towards a second generation benchmark*, Signal Processing, Special Issue: Information Theoretic Issues in Digital Watermarking, V. Cappellini, M. Barni, F. Bartolini, Eds., 81, 6, June 2001, 1177-1214.
55. F. Deguillaume, S. Voloshynovskiy, S. Pereira, M. Madueno, T. Pun, *Filigranage d'images digitales*, Bull. ASE/SEV, 9, Apr. 2001, 19-27.  
Prix ITG 2002 for the best paper in the Bulletin ASE/AES for 2001.
56. D. McG. Squire, H. Mller, W. Mller, S. Marchand-Maillet, T. Pun, *Design and evaluation of a content-based image retrieval system*, Chapter in: Design and Management of Multimedia Information Systems: Opportunities and Challenges, Mahbubur Rahman Syed, Ed., Idea Group Publishing, Hershey, USA, ISBN: 1-930708-00-9, 2001.
57. H. Mller, W. Mller, D. McG. Squire, S. Marchand-Maillet, T. Pun, *Performance evaluation in content-based image retrieval: Overview and comparison*, Pattern Recognition Letters, Spec. Issue on Image and Video Indexing, H. Bunke, X. Jiang, Eds., 22, 5, 2001, 593-601.
58. D. McG. Squire, W. Mller, H. Mller, T. Pun, *Content-based query of image databases, inspirations from text retrieval*, Pattern Recognition Letters, Special Issue: Selected Papers from The 11th Scandinavian Conference on Image Analysis SCIA '99, B.K. Ersboll, P. Johansen, Eds., 21, 13-14, 2000, 1193-1198.
59. S. Pereira, T. Pun, *Robust template matching for affine resistant image watermarks*, IEEE Trans. on Image Processing, 9, 6, 2000, 1123-1129.
60. S. Pereira, T. Pun, *An iterative template matching algorithm using the Chirp-Z transform for digital image watermarking*, Pattern Recognition, 33, 1, Jan. 2000, 173-175.
61. J. Ó Ruanaidh, H. Petersen, A. Herrigel, S. Pereira, T. Pun, *Cryptographic copyright protection for digital images based on watermarking techniques*, Theoretical Computer Science, Special Issue: Cryptography, C. Ding, Ed., 226, 1-2, 17 Sept. 1999, 117-142.
62. D. McG. Squire, T. Pun, *Assessing agreement between human and machine clusterings of image databases*, Pattern Recognition, 31, 12, Dec. 1998, 1905-1919.
63. S. Startchik, R. Milanese, T. Pun, *Projective and illumination invariant representation of disjoint shapes*, Image and Vision Computing, Special Issue on Projection Based Transforms, 16, 9-10, July 1998, 713-723.
64. J. Ó Ruanaidh and T. Pun, *Rotation, scale and translation invariant spread spectrum digital image watermarking*, Signal Processing, Special Issue on Watermarking, B. Macq and I. Pitas, Eds., 66, 3, May 1998, 303-317.
65. C. Rauber, P. Tschudin, T. Pun, *Système d'archivage et de recherche de filigranes*, Gazette du Livre Médiéval, 31, Aut. 1997, 31-40.

66. A. Jacot-Descombes and T. Pun, *Asynchronous perceptual grouping: from contours to relevant 2D structures*, Computer Vision and Image Understanding, 66, 1, April 1997, 1-24.
67. C. Rauber, P. Tschudin, S. Startchik, T. Pun, *Archival and retrieval for large image databases: application to an historical watermarks archive*, in: Objects Applications, D. Tsichritzis, Ed., University of Geneva, 1996, 19-26.
68. T. Pun and D. Squire, *Statistical structuring of pictorial databases for content-based image retrieval systems*, Pattern Recognition Letters, 17, 12, Oct. 1996, 1299-1310.
69. S. Gil, R. Milanese, T. Pun, *Comparing features for target tracking in traffic scenes*, Pattern Recognition, 29, 8, August 1996, 1285-1296.
70. T. Pun et C. De Garrini, *Cybernétique et vision par ordinateur*, in: Le Déficit Visuel, De la Neurophysiologie à la Pratique de la Réadaptation, sous la direction de A. B. Safran et A. Assimacopoulos, Eds., Masson, Paris, France, 1995, 213-224.
71. R. Milanese, S. Gil, T. Pun, *Attentive mechanisms for dynamic and static scene analysis*, Optical Engineering, 34, 8, August 1995, 2428-2434.
72. A. Jacot-Descombes and T. Pun, *LaboImage: an experimental window-based environment for teaching and research in image analysis*, in: Experimental Environments for Computer Vision and Image Processing, H.I. Christensen and J.L. Crowley, Eds., World Scientific, 1994, 89-106.
73. P.-Y. Burgi and T. Pun, *Asynchronous image analysis: using the relationship luminance-to-latency to improve segmentation*, J. Optical Soc. of America A (JOSA), 11, 6, June 1994, 1720-1726.
74. T. Pun, G. Gerig and O.S. Ratib, *Image analysis and computer vision in medicine*, Computerized Medical Imaging and Graphics, Special Issue: Multimedia Techniques in the Medical Environment, O. Ratib, Ed., 18, 2, 1994, 85-96.
75. T. Pun, *2D and 3D imaging in medicine*, Physica Medica, Vol. IX, No. 2-3, April-September 1993, 127-134.
76. R. Milanese, T. Pun, H. Wechsler, *A non-linear integration process for the selection of visual information*, in: Intelligent Perceptual Systems: New Directions in Computational Perception, V. Roberto, Ed., Springer-Verlag Lecture Notes in Artificial Intelligence, 745, 1993, 322-336.
77. A. Jacot-Descombes and T. Pun, *LaboImage*, Prime Time Freeware for Unix, R. Morin, Ed., 2, 2, 1993, and subsequent volumes (software).
78. M. Lefebvre, S. Gil, D. Brunet, E. Natonek, C. Baur, P. Gugerli, T. Pun, *Computer vision and agricultural robotics for disease control: the Potato Operation*, Computers and Electronics in Agriculture, Special Edition on Computer Vision, 9, 1993, 85-102.
79. T. Pun, *Electromagnetic models for perceptual grouping*, in: Advances in Machine Vision: Strategies and Applications, C. Archibald and E. Petriu, Eds., World Scientific Publishing Co., 1992, 129-149.
80. B.L. Trus, M. Unser, T. Pun and A.C. Steven, *Digital image processing of electron micrographs: the PIC System II*, Journal of Scanning Microscopy, Scanning Microscopy Supplement 6, 1992, 441-451 (Proc. 10th Pfefferkorn Conf., Cambridge, England, Sept. 1991).
81. B. Dubrez, A. Jacot-Descombes, T. Pun and G. Cimasoni, *Comparison of photodensitometric with high-resolution digital analysis of bone density from serial dental radiographs*, Journal of Dentomaxillofacial Radiology, Vol. 21, February 1992, 40-44.
82. R. Lutz, T. Pun and C. Pellegrini, *Colour displays and lookup tables: real time modifications of digital images*, Computerized Medical Imaging and Graphics, Vol. 15, No. 2, 1991, 73-84.
83. A. Jacot-Descombes, K. Todorov, C. Pellegrini, D.F. Hochstrasser and T. Pun, *LaboImage: a workstation environment for research in image processing and analysis*, Computer Applications in the Biosciences, Vol. 7, No. 2, April 1991, 225-232.
84. P.-Y. Burgi and T. Pun, *Temporal analysis of contrast and geometric selectivity in early human visual system*, in: Channels In The Visual Nervous System: Neurophysiology, Psychophysics, Models, B. Blum, Ed., Freund, 1991.
85. R. Haralick, H. Bunke, K. Ammon, N. Bartneck, F. Casacuberta, D. Hita, O.V. Larsen, A. Leduc, T. Pun, L. Quan, A. Sanfeliu, B. Wrobel, *Hybrid methods*, Report of the Working Group, in: Structural Pattern Analysis, R. Mohr, T. Pavlidis and A. Sanfeliu, Eds., World Scientific, 1990, 245-247.
86. T. Pun and E. Blake, *Relationships between image synthesis and analysis: towards unification?*, Computer Graphics Forum, Vol. 9, No. 2, July 1990, 149-163.

87. D.F. Hochstrasser, M. Funk, R.D. Appel, T. Pun, R.W. James, A.-C. Hochstrasser, J.-R. Scherrer, C. Pellegrini, A.F. Muller, *From a biopsy to an automatic diagnosis*, Schweizerischen Medizinischen Wochenschrift (Journal Suisse de Médecine), 120, 1990, 1862-1866.  
Also presented at: 58.Jahresversammlung der Schweizerischen Gesellschaft fuer Innere Medizin, Lausanne, 10-12 Mai, 1990.
88. Z.P. Hu, T. Pun and C. Pellegrini, *An expert system for guiding image segmentation*, Computerized Medical Imaging and Graphics, Vol. 14, No. 1, 1990, 13-24.
89. C. Roch, T. Pun, D.F. Hochstrasser and C. Pellegrini, *Automatic learning strategies*, Computerized Medical Imaging and Graphics, Vol. 13, No. 5, 1989, 383-391.
90. P.-Y. Burgi, T. Pun and C. Pellegrini, *Temporal analysis and modeling of the visual circuitry*, Perception, 4, 18, 1989, 501.
91. T. Pun, D. Hochstrasser, R. Appel, M. Funk, V. Villars-Augsburger and C. Pellegrini, *Computerized classification of two-dimensional gel electrophoretograms by correspondence analysis and ascendant hierarchical clustering*, Applied and Theoretical Electrophoresis, 1988, Vol. 1, No. 1, 3-9.
92. D. Hochstrasser, V. Augsburger, T. Pun, D. Weber, C. Pellegrini and A. Mueller, *High resolution mini-two-dimensional gel electrophoresis automatically run and stained in less than six hours with small, ready to use slab gels*, Clinical Chemistry, Vol. 34, No. 1, Jan. 1988, 166-170.
93. M. Unser, J.R. Ellis, T. Pun and M. Eden, *Optimal background estimation in EELS*, J. of Microscopy, Vol. 145, Pt. 3, March 1987, 245-256.
94. T. Pun and M. Eden, *Estimation of first order statistics from a quantized stationary signal*, Signal Processing, Vol. 10, No. 2, March 1986, 115-127.
95. A.C. Steven, C.R. Roberts, J. Hay, M.E. Bisher, T. Pun and B.L. Trus, *Hexavalent capsomers of Herpes Simplex virus Type 2: symmetry, shape, dimensions and oligomeric status*, J. of Virology, February 1986, 57, 2, 578-584.
96. T. Pun, B. Trus, N. Grossman, L. Leive and M. Eden, *Computer automated lanes detection and profiles evaluation of one-dimensional gel electrophoretic autoradiograms*, Electrophoresis, Vol. 6, No. 6, June 1985, 268-274.
97. T. Pun and J.R. Ellis, *Application of simulated Poisson statistical processes to STEM imaging*, Signal Processing, Vol. 8, No. 1, February 1985, 51-62.  
This article has received the *Eurasip's 85 Award for the Best Paper of the year* published in 1985 in Signal Processing.
98. T. Pun, J.R. Ellis and M. Eden, *Weighted least-squares estimation of background in EELS imaging*, J. of Microscopy, Vol. 137, Pt. 1, January 1985, 93-100.
99. T. Pun, J.R. Ellis and M. Eden, *Optimized acquisition parameters and statistical detection limit in quantitative EELS*, J. of Microscopy, Vol. 135, Pt. 3, September 1984, 295-316.
100. T. Pun, *Tactile artificial sight : segmentation of images for scene simplification*, IEEE Trans. Biomedical Engineering, Special issue on: Electronic aspects of modern prosthesis, Vol. BME 29, No. 4, April 1982, 293-299.
101. T. Pun, *Automatic scene simplification by digital image processing aiming at a tactile restitution for sight handicapped people*, Signal Processing, Vol. 4, Nos. 5-6, July 1982, 335-336.
102. T. Pun, *Simplification automatique de scènes par traitement numérique d'images en vue d'une restitution tactile pour handicapés de la vue*, PhD Dissertation Nr. 425, Swiss Federal Institute of Technology (EPFL), 1982.
103. T. Pun, *Entropic thresholding : a new approach*, Computer Graphics and Image Processing, Vol. 16, 1981, 210-239.
104. T. Pun, *Visual prosthesis : digital image processing for tactile conversion*, Sensory World, No. 41, December 1980.
105. T. Pun, *A new method for grey-level picture thresholding using the entropy of the histogram*, Signal Processing, Vol. 2, No. 3, July 1980, 223-237.
106. T. Pun et F. de Coulon, *Traitement et traduction tactile d'images pour prothèse visuelle*, Bull. SEV/ASE 70, No. 17, 8 September 1979, 943-949.

## 2. Patent applications

1. S. Voloshynovskiy, O. Koval, T. Pun, *Secure item identification and authentication based on unclonable features*, US Patent Application No 61/038,084, filed 20 March 2008. World Extension, Patent Application No WO 2009/115611, filed 20 March 2009. Published April 28, 2011.
2. S. Voloshynovskiy, O. Koval, T. Pun, *Brand protection and product authentication using portable devices*, US Patent Application US11/477,486, filed June 27, 2006. Published Jan. 3, 2008, Publ. number US-2008-0002882-A1. Final publication date: Nov. 29, 2012, Patent US 2012/0298743 A1.
3. F. Deguillaume, S. Voloshynovskiy, T. Pun, *Character and vector graphics watermark for structured electronic documents security*, US Patent Application 10/949,318, filed September 27, 2004. Published April 6, 2006, Pub. No. US 2006/0075241 A1. Accepted, Jan. 5, 2010.
4. F. Deguillaume, S. Voloshynovskiy, T. Pun, *Method for the estimation and recovering of general affine transforms*, US Patent Application 10/051,808, filed Jan. 17, 2002; published June 7, 2005, US6904151 B2. <http://www.google.com/patents/US6904151>
5. S. Voloshynovskiy, F. Deguillaume, T. Pun, *Digital watermarking methods robust against local and global geometric distortions and projective transforms*, US Patent Application 10/491,681, filed Oct. 2, 2002; granted Nov. 19, 2009; published Feb. 16, 2010, US7664288 B2. <http://www.google.com/patents/US7664288>
6. S. Voloshynovskiy, F. Deguillaume, S. Pereira, A. Herrigel, T. Pun, *Method for adaptive digital watermarking robust against geometric transforms*, European Patent Application PCT/IB00/01089, filed August 3, 2000; granted, May 2001, WO 0213138, public disclosure: Feb. 14, 2002.
7. S. Pereira, S. Voloshynovskiy, and T. Pun, *A method for generating and decoding image dependant watermarks*, European Patent Application PCT/IB00/00494, filed April 20, 2000. Granted, WO 0182226.
8. A. Herrigel, J. Ó Ruanaidh and T. Pun, *Method for generating digital watermarks and for exchanging data containing digital watermarks*, European Patent Application EU 1879, Sept. 1997 (PCT Filed Sept. 1998). Granted, WO 9917536 + EP 1013073. Extension to Japan and North-America (March 2000).

### 3. International conferences with refereed full length articles, invited talks, full demonstrations

1. Michal Muszynski, Leimin Tian, Catherine Lai, Johanna D. Moore, Theodoros Kostoulas, Patrizia Lombardo, Thierry Pun, and Guillaume Chanel, "Exploring film aesthetic experience: aesthetic emotion recognition from spectators physiological and behavioral signals", ACM IUI 2019, Int. Conf. on Intelligent User Interfaces, March 17-20, 2019, Los Angeles, CA, USA. Subm. Oct. 2018.
2. Chen Wang, P. Lopes, T. Pun, G. Chanel, "Towards a better gold standard: Denoising and modelling continuous emotion annotations based on feature agglomeration and outliers regularisation", AVEC 2018, 8th Audio/Visual Emotion Challenge and Workshop, Co-located with ACM Multimedia 2018, 22-26 October, Seoul, Korea.
3. Chen Wang, T. Pun, G. Chanel, XXX, AAMAS 2018, Int. Conf. on Autonomous Agents and Multiagent Systems, Doctoral Consortium, Stockholm, Sweden, July 10-15, 2018. Subm. Feb 2018.
4. S. Rayat-Doost, T. Pun, M. Soleymani, "Cross-modality interaction between EEG signals and facial expression", Doctoral Consortium, ICMI 2017, 19th Int. Conf. on Multimodal Interaction, Glasgow, Scotland, Nov. 13-17, 2017.
5. G. Chanel, S. Avry, G. Molinari, M. Betrancourt, T. Pun, "Multiple users' emotion recognition: Improving performance by joint modeling of affective reactions", Special Session: Brain and physiological signals for multi-user modeling, ACII 2017, 7th Int. Conf. Affective Computing and Intelligent Interaction, San Antonio, Texas, USA, Oct. 23-26, 2017.
6. Leimin Tian, M. Muszynski, C. Lai, J. D. Moore, T. Kostoulas, P. Lombardo, T. Pun and G. Chanel, "Recognizing induced emotions of movie audience: are induced and perceived emotions the same?", ACII 2017, 7th Int. Conf. Affective Computing and Intelligent Interaction, San Antonio, Texas, USA, Oct. 23-26, 2017.
7. S. Avry, G. Chanel, M. Betrancourt, T. Pun, G. Molinari, "Feedbacks de contrle et de valeur dans un jeu vido de rsolution de problmes collabof: Effets sur les motions et la collaboration", EIAH 2017, Environnements Informatiques pour l'Apprentissage Humain, 6-9 juin 2017, Strasbourg, France.

8. S. Avry, G. Chanel, T. Pun, G. Molinari, M. Btrancourt, "An emotion awareness tool for the sharing of emotions: What impact on computer-supported collaborative processes?", CSCL 2017, The Int. Conf. on Computer-Supported Collaborative Learning, June 18th-21, 2017, Philadelphia, PA, USA.
9. S. Avry, G. Chanel, T. Pun, G. Molinari, M. Btrancourt, "The interplay between shared emotions and collaborative processes during a computer-supported creative problem-solving task", CSEDU 2017, 9th Int. Conf. on Computer Supported Education, April 21 - 23, 2017, Porto, Portugal. (Subm. Feb 2017)
10. T. Pun, "Affective Computing", Invited Talk, Firmenich, Geneva, Switzerland, Jan. 11, 2017.
11. M. Muszynski, T. Kostoulas, P. Lombardo, T. Pun, G. Chanel, "Synchronization among groups of spectators for highlight detection in movies", ACM Multimedia 2016, Oct. 15-19, 2016, Amsterdam, The Netherlands.
12. S. Cloix, T. Pun, D. Hasler, "Real-time scale-invariant object recognition from light field imaging", VISAPP 2016, 11th Int. Conf. on Computer Vision Theory and Applications, Rome, Italy, Feb. 27-29, 2016.
13. T. Kostoulas, G. Chanel, M. Muszynski, P. Lombardo, T. Pun, "Dynamic time warping of multimodal signals for detecting highlights in movies", Interpersonal@ICMI 2015, First International Workshop on Modeling INTEPERsonal Synchrony, 17th ACM Int. Conference on Multimodal Interaction, Nov. 9-13, 2015, Seattle, USA.
14. M. Muszynski, T. Kostoulas, G. Chanel, P. Lombardo, T. Pun, Spectators' synchronization detection based on manifold representation of physiological signals: application to movie highlights detection", ICMI 2015, 17th ACM Int. Conference on Multimodal Interaction, Nov. 9-13, 2015, Seattle, USA.
15. M. Soleymani, M. Pantic, T. Pun, "Multi-modal emotion recognition in response to videos", ACII 2015, Special Session on Most Influential Articles in IEEE - Transactions on Affective Computing, Sept. 21-24, 2015, Xi'an, China (invited). Together with a poster in a special session.
16. V. Weiss, A. Korolev, G. Bologna, S. Cloix, T. Pun, "An Embedded Ground Change Detector for a "Smart Walker"", IWINAC2015, 6th Int. Work-conference on the Interplay between Natural and Artificial Computation, June 1-5, 2015, Elche, Spain.
17. T. Kostoulas, G. Chanel, M. Muszynski, P. Lombardo, T. Pun, "Identifying aesthetic highlights in movies from clustering of physiological and behavioral signals", QoMEX 2015, 7th Int. Workshop on Quality of Multimedia Experience, 26-29 May 2015, Costa Navarino, Messinia, Greece.
18. D. Cereghetti, G. Molinari, G. Chanel, T. Pun, M. Btrancourt, "Sharing emotions during a computer-mediated collaborative task: a dual eye-tracking study", EARLI 2015, European Conference for Research on Learning and Instruction, 25-29 Aug. 2015, Limassol, Cyprus.
19. S. Cloix, G. Bologna, V. Weiss, T. Pun, D. Hasler, "Descending stair detection for low-power sensors", ACVR 2014 - 2nd Workshop on Assistive Computer Vision and Robotics, in conjunction with ECCV 2014 (6-12 Sep. 2014), 12 Sept. 2014, Zrich, Switzerland. In: Lecture Notes in Computer Science, Volume 8927, Springer.
20. V. Weiss, G. Bologna, S. Cloix, T. Pun, "Walking behavior change detector for a "smart" walker", 6th Int. Conf. on Intelligent Human-Computer Interaction, IHCI 2014, Evry, France, December 8-10, 2014. In: Procedia Computer Science 39, Patrick Horain, Amine Chellali and Malik Mallem, Eds., 2014, 43 - 50. doi: 10.1016/j.procs.2014.11.008.
21. D. Cereghetti, G. Molinari, G. Chanel, T. Pun, M. Btrancourt, " Visual processing of emotions during a computer-mediated collaborative task: An eye tracking study", 2014 joint SIG Meeting of EARLI SIG 6 (Instructional Design) and SIG 7 (Learning and Instruction with Computers), August 27-29, 2014, Rotterdam, The Netherlands.
22. G. Molinari, M. Btrancourt, G. Chanel, T. Pun, "Le partage des motions dans la collaboration distance mdiatise par ordinateur", 28me Congr. Ass. Int. de Pdagogie Universitaire (AIPU), 18-22 mai 2014, Mons, Belgium.
23. S. Cloix, V. Weiss, G. Bologna, T. Pun, D. Hasler, "Obstacles and objects detection using sparse 3D information for a smart walker", VISAPP 2014, 9th Int. Conf. on Computer Vision Theory and Applications, 5-8 January 2014, Lisbon, Portugal.
24. V. Weiss, S. Cloix, G. Bologna, T. Pun, D. Hasler, "A robust, real-time ground change detector for a "smart" walker", VISAPP 2014, 9th Int. Conf. on Computer Vision Theory and Applications, 5-8 January 2014, Lisbon, Portugal.
25. G. Chanel, G. Molinari, D. Cereghetti, T. Pun and M. Btrancourt, "Assessment of computer-supported collaborative processes using interpersonal physiological and eye-movement coupling", ACII 2013, 5th Int. Conf. Affective Computing and Intelligent Interaction, Geneva, Switzerland, Sept. 2-5, 2013.



26. G. Bologna, J. D. Gomez, T. Pun, "Vision substitution experiments with See CoLoR", IWINAC2013, 5th. Int. Workshop on the Interplay between Natural and Artificial Computation, Mallorca, Balearic Islands, Spain, June 10-14, 2013.
27. G. Molinari, G. Chanel, M Btrancourt, T. Pun, C. Bozelle, "Emotion feedback during computer-mediated collaboration: Effects on self-reported emotions and perceived interaction", CSCL 2013, 10th Int. Conf. on Computer Supported Collaborative Learning, June 15-19, 2013, University of Wisconsin - Madison, USA.
28. G. Molinari, C. Bozelle, D. Cereghetti, G. Chanel, M Btrancourt, T. Pun, "Feedback motionnel et collaboration mdiatise par ordinateur: Quand la perception des interactions est lie aux traits motionels", EIAH 2013, Environnements Informatiques pour l'Apprentissage Humain, 6me dition, 29-31 mai 2013, Toulouse, France.
29. G. Chanel, K. Kalogianni, T. Pun, "GamEMO: How physiological signals show your emotions and enhance your game experience", ACM ICMI, 14th. Int. Conf. on Multimodal Interaction, October 22-26th, 2012, Santa Monica, CA, USA, 297-298.  
This demonstration won the Outstanding Demo Runner-Up prize.
30. J. Gomez, G. Bologna, T. Pun, "Real-time image registration of RGB webcams and colorless 3D time-of-flight cameras", Proc. ECCV 2012, 12th Europ. Conf. on Comp. Vision, 7-13 Oct. 2012, Firenze, Italy, A. Fusiello et al., Eds: ECCV 2012 Ws/Demos, Part III, Springer Lecture Notes in Computer Science, Vol. LNCS 7585, 589-592.
31. J. Gomez, G. Bologna, T. Pun, "Non-visual-cueing-based sensing and understanding of nearby entities in aided navigation", ACM ASSETS 2012, 14th Int. ACM SIGACCESS Conf. on Computers and Accessibility, 22-24 Oct. 2012, Boulder, CO, USA (poster, demonstration).
32. J. D. Gomez, G. Bologna, T. Pun, *Spatial awareness and intelligibility for the blind: Audio-touch interaction*, ACM SIGCHI Conf. on Human Factors in Computing Systems, May 5-10, 2012, Austin, TX, USA.
33. J. D. Gomez, S. Mohammed, G. Bologna, T. Pun, *3D scene accessibility for the blind via auditory-multitouch interfaces*, AEGIS Workshop and Int. Conf. "Accessibility Reaching Everywhere", Brussels, Belgium, 28-30 November, 2011.
34. J. Gomez, G. Bologna, T. Pun, *A virtual ceiling mounted depth camera using orthographic Kinect*, ICCV 2011, 13th Int. Conf. on Computer Vision, 6-13 Nov. 2011, Barcelona, Spain (demonstration track with abstract).
35. J. Gomez, S. Mohammed, G. Bologna, T. Pun, *Toward 3D scene understanding via audio-description: Kinect-iPad fusion for the visually impaired*, ACM ASSETS 2011, 24-26 Oct. 2011, Dundee, Scotland (Demonstration track with short paper).
36. J. Gomez, G. Bologna, B. Deville, T. Pun, *Multisource sonification for visual substitution in an auditory memory game: one, or two fingers?*, ICAD 2011, Int. Conf. on Auditory Display, June 20-24, 2011, Budapest, Hungary.
37. M. Soleymani, S. Koelstra, I. Patras, T. Pun, *Continuous emotion detection in response to music videos*, EmoSPACE 2011, 1st Int. Workshop on Emotion Synthesis, rePresentation, and Analysis in Continuous spacE, in conjunction with IEEE FG 2011, March 24-25, 2011, Santa Barbara, CA, USA.
38. T. Pun, *Affective computing and multimodal HCI: issues and examples, Caractrisation de l'tat motionnel partir de signaux physiologiques pour adapter la difficult d'un jeu (Emotion assessment from physiological signals for adaptation of games difficulty)*, Invited talk, GDR-ISIS (Information, Signal, Image et Vision) Workshop on Emotion, Nov. 25, 2010, Lyon, France.
39. J. D. Gomez, G. Bologna, T. Pun, "Color-audio encoding interface for visual substitution: See CoLoR Matlab-based demo", ASSETS 2010, 12th Int. ACM SigAccess Conf. on Computers and Accessibility, Demonstrations Track, Oct. 25-27, 2010, Orlando, Florida, USA (extended abstract).
40. B. Deville, G. Bologna, T. Pun, "Detecting objects and obstacles for visually impaired individuals using visual saliency", ASSETS 2010, 12th Int. ACM SigAccess Conf. on Computers and Accessibility, Demonstrations Track, Oct. 25-27, 2010, Orlando, Florida, USA (extended abstract).
41. S. Koelstra, A. Yazdani, M. Soleymani, C. Mhl, Jong-Seok Lee, A. Nijholt, T. Pun, T. Ebrahimi, and I. Patras, *Single trial classification of EEG and peripheral physiological signals for recognition of emotions induced by music videos*, BI'2010, Brain Informatics, Aug. 28-30, 2010, Toronto, Canada.
42. G. Bologna, B. Deville, T. Pun, *Sonification of color and depth in a mobility aid for blind people*, ICAD 2010, 16th Int. Conf. on Auditory Displays, June 9-15, 2010, Wash. DC, USA.
43. J. J. M. Kierkels, M. Soleymani, T. Pun, *Identification of narrative peaks in clips: text features perform best*, VideoCLEF 2009, Cross Language Evaluation Forum (CLEF) Workshop, Post-Conference Proc., Springer LNCS, 2010.

44. J. J. M. Kierkels, M. Soleymani, T. Pun, *Identification of narrative peaks in clips: text features perform best*, VideoCLEF 2009, Cross Language Evaluation Forum (CLEF) Workshop, Working Notes (at ECDL 2009, 13th Europ. Conf. on Digital Libraries), Sep. 27 - Oct. 2, 2009, Corfu, Greece.
45. M. Soleymani, J. Davis, T. Pun, *A collaborative personalized affective video retrieval system*, ACII 2009, Int. Conf. on Affective Computing and Intelligent Interaction, Sept. 10-12, 2009, Amsterdam, The Netherlands, 588-589. (Demonstration track, with extended abstract and poster).
46. J. Kierkels, T. Pun, *Simultaneous exploitation of explicit and implicit tags in affect-based multimedia retrieval*, ACII 2009, Int. Conf. on Affective Computing and Intelligent Interaction, Sept. 10-12, 2009, Amsterdam, The Netherlands, 274-279.
47. M. Soleymani, J. Kierkels, G. Chanel, T. Pun, *A Bayesian framework for video affective representation*, ACII 2009, Int. Conf. on Affective Computing and Intelligent Interaction, Sept. 10-12, 2009, Amsterdam, The Netherlands, 267-273.
48. T. Pun, *Emotion assessment from physiological signals for adaptation of games difficulty*, Invited talk, ABCI 2009, Affective Brain-Computer Interfaces Workshop, Sept. 9, 2009, in conjunction with ACII 2009, Int. Conf. on Affective Computation and Intelligent Interaction, Sept. 10-12 2009, Amsterdam, The Netherlands.
49. J. Kierkels, M. Soleymani, T. Pun, *Queries and tags in affect-based multimedia retrieval*, IEEE ICME'09, Int. Conf. on Multimedia and Expo, Special Session on Implicit Tagging, M. Pantic and A. Vinciarelli, Chairs, June 28 - July 3, 2009, New York, NY, USA.
50. G. Bologna, B. Deville, T. Pun, *Blind navigation along a sinuous path by means of the See ColOr interface*, IWINAC, Int. Work-conference on the Interplay between Natural and Artificial Computation, June 22-26, 2009, Santiago de Compostela, Galicia, Spain.
51. G. Bologna, S. Malandain, B. Deville, T. Pun, *The multi-touch See ColOr interface*, ICTA 2009, The 2nd Int. Conf. on Information and Communication Technologies and Accessibility, May 7-9, 2009, Hammamet, Tunisia.
52. S. Voloshynovskiy, O. Koval, F. Beekhof, T. Pun, *Conception and limits of robust perceptual hashing: toward side information assisted hash functions*, 21th Annual IST/SPIE Symposium on Electronic Imaging, Conference EI120: Media Forensics and Security XI, Edward J. Delp III; Jana Dittmann; Nasir D. Memon; Ping Wah Wong, Chairs, 27-31 Jan. 2009, San Jose, CA, USA.
53. S. Voloshynovskiy, O. Koval, F. Beekhof, T. Pun, *Random projections based item authentication*, 21th Annual IST/SPIE Symposium on Electronic Imaging, Conference EI120: Media Forensics and Security XI, Edward J. Delp III; Jana Dittmann; Nasir D. Memon; Ping Wah Wong, Chairs, 27-31 Jan. 2009, San Jose, CA, USA.
54. M. Soleymani, G. Chanel, J. Kierkels, T. Pun, *Affective characterization of movie scenes based on multimedia content analysis and user's physiological emotional responses*, ISM2008, IEEE International Symposium on Multimedia, December 15-17, 2008, Berkeley, California, USA, 228-235. (Talk given by T. Pun)
55. M. Soleymani, G. Chanel, J. Kierkels, T. Pun, *Affective ranking of movie scenes using physiological signals and content analysis*, ACM Multimedia 2008, Workshop on Many Faces of Multimedia Semantics (MS'08), Oct. 27-31, 2008, Vancouver, BC, Canada, 32-39.
56. J. J. M. Kierkels, T. Pun, *Towards detection of interest during movie scenes*, MIAUCE - First Int. Workshop on Multimodal Interactions Analysis of Users in a Controlled Environment, Chania, Crete, Greece, October 24, 2008 (Post-conf. workshop, ICMI 08, 10th Int. Conf. on Multimodal Interfaces, Oct. 20-24, 2008).
57. B. Deville, G. Bologna, M. Vinckenbosch, T. Pun, *Guiding the focus of attention of blind people with visual saliency*, European Conference on Computer Vision (ECCV 2008), Oct. 12-18, 2008, Workshop on Computer Vision Applications for the Visually Impaired (CVAVI 08), Marseille, France, Oct. 18, 2008.
58. G. Chanel, C. Rebetez, M. Betrancourt, T. Pun, *Boredom, engagement and anxiety as indicators for adaptation to difficulty in games*, 11th MindTrek Conference, MindTrek 2008: Entertainment and Media in the Ubiquitous Era, October 7-9, 2008, Tampere, Finland.
59. M. Soleymani, G. Chanel, J. Kierkels, T. Pun, *Valence-arousal representation of movie scenes based on multimedia content analysis and user's physiological emotional responses*, MLMI 2008, 5th Joint Workshop on Machine Learning and Multimodal Interaction, 8-10 Sept. 2008, Utrecht, The Netherlands. (PhD student poster session, with extended abstract).
60. S. Voloshynovskiy, O. Koval, T. Pun, *Multimodal authentication based on random projections and distributed coding*, 10th ACM Workshop on Multimedia and Security, Sept. 22-23, 2008, Oxford, UK.

61. O. Koval, S. Voloshynovskiy, T. Pun, *Privacy-preserving multimodal person and object identification*, 10th ACM Workshop on Multimedia and Security, Sept. 22-23, 2008, Oxford, UK.
62. O. Koval, S. Voloshynovskiy, T. Pun, *Privacy preserving biometric person identification*, EUSIPCO-2008 - 16th European Signal Processing Conference, August 25-29, 2008, Lausanne, Switzerland.
63. G. Bologna, B. Deville, and T. Pun, *Pairing colored socks and following a red serpentine with sounds of musical instruments*, ICAD 08, Int. Conf. on Auditory Displays, June 24-27, Paris, France.
64. G. Bologna, B. Deville, M. Vinckenbosch and T. Pun, *A perceptual interface for vision substitution in a color matching experiment*, IEEE IJCNN, Int. Joint Conf. Neural Networks, Part of IEEE World Congress on Computational Intelligence, June 1-6, 2008, Hong Kong. Published in Neural Networks, 2008, 1621 - 1628, DOI: 10.1109/IJCNN.2008.4634014.
65. F. Beekhof, O. Koval, R. Villn, S. Voloshynovskiy, E. Topak and T. Pun, *Document forensics based on steganographic anti-counterfeiting markings and mobile architectures*, Im Proceedings of eForensics, 2008.
66. S. Voloshynovskiy, O. Koval, F. Beekhof, T. Pun, *Unclonable identification and authentication based on reference list decoding*, SECSI, Workshop on Secure Component and System Identification, March 17-18, 2008, Berlin, Germany.
67. S. Voloshynovskiy, O. Koval, F. Beekhof and T. Pun, *Unclonable identification and authentication based on reference list decoding*, SECSI - Secure Component and System Identification, Berlin, Germany, March 17-18, 2008.
68. O. Koval, S. Voloshynovskiy, F. Beekhof, T. Pun, *Error exponent analysis of person identification based on fusion of dependent/independent modalities: multiple hypothesis testing case*, in Proc. 20th Annual IST/SPIE Symposium on Electronic Imaging, Conference on Security, Forensics, Steganography, and Watermarking of Multimedia Contents X, 27-31 January 2008, San Jose, CA, USA. paper 6819-25.
69. O. Koval, S. Voloshynovskiy, F. Beekhof and T. Pun, *Security analysis of robust perceptual hashing*, 20th Annual IST/SPIE Symposium on Electronic Imaging, Conference on Security, Forensics, Steganography, and Watermarking of Multimedia Contents X, Vol. 6819, E. J. Delp III, P. W. Wong, J. Dittmann, N. D. Memon, Eds., 27-31 January 2008, San Jose, CA, USA. paper 6819-5.
70. O. Koval, S. Voloshynovskiy, F. Beekhof and T. Pun, *Analysis of physical unclonable identification based on reference list decoding*, in Proc. 20th Annual IST/SPIE Symposium on Electronic Imaging, Conference on Security, Forensics, Steganography, and Watermarking of Multimedia Contents X, Vol. 6819, E. J. Delp III, P. W. Wong, J. Dittmann, N. D. Memon, Eds., 27-31 January 2008, San Jose, CA, USA. paper 6819-10.
71. F. Beekhof, S. Voloshynovskiy, O. Koval, R. Villn and T. Pun, *Secure surface identification codes*, in Proc. 20th Annual IST/SPIE Symposium on Electronic Imaging, Conference on Security, Forensics, Steganography, and Watermarking of Multimedia Contents X, 27-31 January 2008, San Jose, CA, USA. paper 6819-13.
72. B. Deville, G. Bologna, M. Vinckenbosch, T. Pun, *Depth-based detection of salient moving objects in sonified videos for blind users*, VISAPP 2008, Int. Conf. on Computer Vision Theory and Applications, 22-25 January, 2008, Funchal, Madeira Island, Portugal.
73. O. Koval, S. Voloshynovskiy, T. Pun, *Analysis of multimodal binary detection systems based on dependent/independent modalities*, IEEE MMSP 2007, Int. Workshop on Multimedia Signal Processing, Chania, Crete, Greece, October 1-3, 2007.
74. S. Voloshynovskiy, O. Koval, F. Beekhof, T. Pun, *Robust perceptual hashing as classification problem: decision-theoretic and practical considerations*, IEEE MMSP 2007, Int. Workshop on Multimedia Signal Processing, Chania, Crete, Greece, October 1-3, 2007.
75. R. Rytsar, T. Pun, *Human head models for the EEG forward problem*, International ECCOMAS Thematic Conference VipIMAGE 2007, 17-19th October 2007, FEUP, Porto, Portugal. In: Computational Vision and Medical Image Processing, J. Tavares, N. Jorge, Eds., Taylor and Francis Group, London, 2008, 41-46.
76. G. Chanel, K. Ansari-Asl, T. Pun, *Valence-arousal evaluation using physiological signals in an emotion recall paradigm*, 2007 IEEE SMC, Int. Conf. on Systems, Man and Cybernetics, Smart cooperative systems and cybernetics: advancing knowledge and security for humanity, Montreal, Canada, Oct. 7-10, 2007.
77. K. Ansari-Asl, G. Chanel, T. Pun, *A channel selection method for EEG classification in emotion assessment based on synchronization likelihood*, Eusipco 2007, 15th Eur. Signal Proc. Conf., Sept. 3-7, 2007, Poznan, Poland.
78. R. Rytsar and T. Pun, *Computational aspects of the EEG forward problem solutions for real head model using finite element method*, 29th Annual Int. Conf. IEEE Engineering in Medicine and Biology Society (EMBC07), in conjunction with Biennial Conf. of the French Society of Biological and Medical Engineering (SFGBM), August 23-26, 2007, Lyon, France.

79. G. Bologna, B. Deville, T. Pun, M. Vinckenbosch, *Identifying major components of pictures by audio encoding of colors*, IWINAC2007, 2nd. Int. Work-conf. on the Interplay between Natural and Artificial Computation, Murcia, Spain, June 18-21, 2007.
80. S. Voloshynovskiy, O. Koval, F. Beekhof, T. Pun, *Decision-theoretic consideration of robust perceptual hashing: link to practical algorithms*, 9th Information Hiding Workshop, Third Wavila Challenge - WaCha-07, Saint-Malo, France, June 11-14, 2007 (invited talk).
81. E. Topak, S. Voloshynovskiy, O. Koval and T. Pun, *Sensitivity and reversibility on one line*, Security, Steganography, and Watermarking of Multimedia Contents IX (EL 120), IS and T / SPIE Electronic Imaging, 28 January-1 February 2007, San Jose, California, USA.
82. R. Villn, S. Voloshynovskiy, O. Koval, F. Deguillaume and T. Pun, *Tamper-proofing of electronic and printed text documents*, Security, Steganography, and Watermarking of Multimedia Contents IX (EL 120), IS and T / SPIE Electronic Imaging, 28 January-1 February 2007, San Jose, California, USA.
83. O. Koval, S. Voloshynovskiy and T. Pun, *Error exponent analysis of person identification based on fusion of independent modalities*, Security, Steganography, and Watermarking of Multimedia Contents IX (EL 120), IS and T / SPIE Electronic Imaging, Vol. 6505, E. J. Delp III and P. W. Wong, Eds., 28 January-1 February 2007, San Jose, California, USA.
84. S. Kosinov, S. Marchand-Maillet, I. Kosintsev, C. Dulong, T. Pun, *Dual diffusion model of spreading activation for content-based image retrieval*, MIR 2006, 8th ACM SIGMM International Workshop on Multimedia Information Retrieval, In conjunction with ACM Multimedia 2006, October 26-27, 2006, Santa Barbara, CA, USA.
85. T. Pun, G. Chanel, J. Kronegg, D. Grandjean, I. Alecu, *Pattern recognition in peripheral and central signaling*, Workshop on Multimodal synchronization in affective expressions, Humaine European NOE 3rd Summer School and Affective Sciences NCCR, September 22-24, 2006, Genova, Italy. Invited talk, presented by T. Pun and G. Chanel.
86. S. Voloshynovskiy, O. Koval, E. Topak, J.E. Vila-Forcn, and T. Pun, *On reversibility of random binning based data-hiding techniques: security perspectives*, Proc. ACM Multimedia and Security Workshop, September 26-27, 2006, Geneva, Switzerland, 89-96.
87. O. Koval, S. Voloshynovskiy, T. Holotyak, T. Pun, *Information-theoretic analysis of steganalysis in real images*, Proc. ACM Multimedia and Security Workshop, September 26-27, 2006, Geneva, Switzerland, 11-16.
88. G. Chanel, J. Kronegg, D. Grandjean, T. Pun, *Emotion assessment: Arousal evaluation using EEG's and peripheral physiological signals*, Proc. Int. Workshop Multimedia Content Representation, Classification and Security (MRCS), Special Session: Multimodal Signal Processing, Sept. 11-13, 2006, Istanbul, Turkey, B. Gunsel, A. K. Jain, A. M. Tekalp, B. Sankur, Eds., Lecture Notes in Computer Science, Vol. 4105, Springer, 530-537 (talk presented by T. Pun).
89. S. Voloshynovskiy, O. Koval, M. Lozynska, T. Pun, *Novel interactive services for e-tourism and e-commerce*, XVI International Conference of the Academy of Business and Administrative Sciences (ABAS), July 21-23, 2006, Montreux, Switzerland.
90. O. Koval, S. Voloshynovskiy, T. Pun, *Host communications for non-Gaussian state-dependant channels: Laplacian case*, ICME 2006, IEEE Int. Conf. on Multimedia and Expo, July 9-12, 2006, Toronto, Canada.
91. S. Voloshynovskiy, O. Koval, E. Topak and T. Pun, *Message communications and channel state estimation for state dependent channels*, Proceedings of 27-th Symposium on information theory in the Benelux, Noordwijk, The Netherlands, June 8-9, 2006.
92. O. Koval, S. Voloshynovskiy and T. Pun, *Laplacian channel state estimation for state dependent channels*, Proceedings of 27-th Symposium on information theory in the Benelux, Noordwijk, The Netherlands, June 8-9, 2006.
93. J. Vila, S. Voloshynovskiy, O. Koval, T. Pun, *Costa Problem under Channel Ambiguity*, ICASSP 2006, IEEE Int. Conf. on Acoustics, Speech and Signal Processing, Toulouse, France, May 14-18, 2006.
94. B. Janvier, E. Bruno and S. Marchand-Maillet and T. Pun, "Performance evaluation of a contextual news story segmentation algorithm", Proc. SPIE Electronic Imaging 2006, Vol. 6073, Multimedia Content Analysis, Management, and Retrieval 2006 (EI122), San Jose, USA, January 15-19 2006.
95. Y. Rytsar, S. Voloshynovskiy, O. Koval, F. Deguillaume, E. Topak, S. Startchik, T. Pun, *Tangible interactive system for document browsing and visualization of multimedia data*, Paper 6073-32, Multimedia Content Analysis, Management, and Retrieval 2006, IS and T / SPIE Electronic Imaging, 15-19 Jan. 2006, San Jose, CA, USA.

96. E. Topak, S. Voloshynovskiy, O. Koval, M. Haroutunian, J.E. Vila-Forcen and T. Pun, *E-capacity and security analysis of data-hiding channels with geometrical attacks*, Security, Steganography, and Watermarking of Multimedia Contents VIII (EI121), IS and T / SPIE Electronic Imaging, 15-19 Jan. 2006, San Jose, CA, USA.
97. S. Voloshynovskiy, O. Koval, R. Villan, E. Topak, J.E. Vila, F. Deguillaume, Y. Rytsar and T. Pun, *Information-theoretic analysis of electronic and printed document authentication*, Paper Number 6072-49, Security, Steganography, and Watermarking of Multimedia Contents VIII (EI121), IS and T / SPIE Electronic Imaging, 15-19 Jan. 2006, San Jose, CA, USA.
98. J.E. Vila-Forcen, S. Voloshynovskiy, O. Koval, E. Topak and T. Pun, *Asymmetric side information and non-noticeable Costa data-hiding*, Paper Number 6072-51, Security, Steganography, and Watermarking of Multimedia Contents VIII (EI121), IS and T / SPIE Electronic Imaging, 15-19 Jan. 2006, San Jose, CA, USA.
99. J.E. Vila-Forcen, O. Koval, S. Voloshynovskiy, and T. Pun, *Performance analysis of non-uniform quantization-based data-hiding*, Paper Number 6072-33, Security, Steganography, and Watermarking of Multimedia Contents VIII (EI121), IS and T / SPIE Electronic Imaging, 15-19 Jan. 2006, San Jose, CA, USA.
100. R. Villan, S. Voloshynovskiy, O. Koval, J.E. Vila-Forcen, E. Topak, F. Deguillaume, Y. Rytsar, and T. Pun, *Text Data-Hiding for Digital and Printed Documents: Theoretical and Practical Considerations*, Paper Number 6072-38, Security, Steganography, and Watermarking of Multimedia Contents VIII (EI121), IS and T / SPIE Electronic Imaging, 15-19 Jan. 2006, San Jose, CA, USA.
101. S. Kosinov, S. Marchand-Maillet, T. Pun, *Countering the false positive projection effect in nonlinear asymmetric classification*, IEEE Symposium on Signal Processing and Information Technology (ISSPIT), Dec. 18-21, 2005, Athens, Greece.
102. S. Voloshynovskiy, O. Koval, F. Deguillaume, T. Pun, *Multimedia security: open problems and solutions*, Proceedings of NATO - Advanced Study Institute: Security Through Science Program, NATO/OTAN Network Security and Intrusion Detection, Erevan, Armenia, October 1-12, 2005. (2 hour tutorial).
103. J. Kronegg, T. Alecu, G. Chanel, S. Voloshynovskiy, T. Pun, *Analyse des mesures de dbit pour interfaces cerveau-ordinateur*, TAIMA'05, Traitement et Analyse de l'Information : Mthodes et Applications, Hammamet, Tunisie, 26 sep - 1 oct, 2005.
104. S. Voloshynovskiy, O. Koval, E. Topak, J. E. Vila Forcen, P. Comesana, and T. Pun, *On reversibility of random binning techniques: multimedia perspectives*, Lecture Notes in Computer Science: Communications and Multimedia Security, Vol. LNCS 3677, Proc. 9th IFIP TC-6 TC-11 Conf. on Communications and Multimedia Security CMS 2005, Salzburg, Austria, Sep. 19-21, 2005, 108-118.
105. R. Villan, S. Voloshynovskiy, F. Deguillaume, Y. Rytsar, O. Koval, E. Topak, E. Rivera and T. Pun, *A theoretical framework for data-hiding in digital text documents*, Lecture Notes in Computer Science: Communications and Multimedia Security, Vol. LNCS 3677, Proc. 9th IFIP TC-6 TC-11 Conf. on Communications and Multimedia Security CMS 2005, Salzburg, Austria, Sep. 19-21, 2005, 280-281.
106. J.E. Vila-Forcen, S. Voloshynovskiy, O. Koval, F. Perez-Gonzalez and T. Pun, *Practical data-hiding: additive attacks performance analysis*, Lecture Notes in Computer Science, Vol. LNCS 3710, Proc. Int. Workshop on Digital Watermarking, Springer Verlag, M. Barni et al, Eds., Siena, Italy, Sep. 15-17, 2005, 244-259. (invited tutorial).
107. Y. Rytsar, F. Deguillaume, S. Voloshynovskiy, E. Rivera, and T. Pun, *Text document data-hiding: Security and multimedia perspectives*, Fifth Conference on Computer Science and Information Technologies (CSIT'05), 19-23 September, 2005, Yerevan, Armenia.
108. J. Vila, O. Koval, S. Voloshynovskiy, and T. Pun, *Asymmetric spread spectrum data hiding for Laplacian host data*, IEEE Int. Conf. on Image Processing, ICIP 2005, Sept. 11-14, 2005, Genova, Italy.
109. O. Koval, S. Voloshynovskiy, and T. Pun, *Laplacian host estimation for state dependend channels*, ICIP 2005, Int. Conf. Image Processing, Genova, Sept. 11-14, 2005.
110. S. Voloshynovskiy, O. Koval, F. Perez-Gonzalez and T. Pun, *Data-hiding with assymmetrically available side information at encoder and decoder*, ICIP 2005, Int. Conf. Image Processing, Genova, Sept. 11-14, 2005.
111. E. Topak, S. Voloshynovskiy, O. Koval, T. Pun, *Joint achievable rate-complexity analysis of geometrically robust data-hiding codes in asymptotic set-ups*, Eusipco 2005, 13th. Eur. Signal Proc. Conf., Sept. 4-8, 2005, Antalya, Turkey.
112. T. Alecu, S. Voloshynovskiy, T. Pun, *Denoising with infinite mixture of Gaussians*, Eusipco 2005, 13th. Eur. Signal Proc. Conf., Sept. 4-8, 2005, Antalya, Turkey.

113. T. Alecu, S. Voloshynovskiy, T. Pun, *The Gaussian transform*, Eusipco 2005, 13th. Eur. Signal Proc. Conf., Sept. 4-8, 2005, Antalya, Turkey.
114. S. Voloshynovskiy, O. Koval, F. Perez-Gonzalez, K. Mihcak, J. E. Vila-Forcen, and T. Pun, *Data-hiding with asymmetrically available side information at encoder and decoder*, EUSIPCO 2005, 13th. Eur. Signal Proc. Conf., Sept. 4-8, 2005, Antalya, Turkey (paper 1870).
115. B. Janvier, N. Moenne-Loccoz, S. Marchand Maillet, T. Pun, *A contextual model for semantic video structuring*, Eusipco 2005, 13th. Eur. Signal Proc. Conf., Sept. 4-8, 2005, Antalya, Turkey.
116. S. Kosinov, I. Titov and S. Marchand Maillet, *Large Margin Multiple Hyperplane Classification for Content-based Multimedia Retrieval*, Proceedings 1st Workshop on Machine Learning Techniques for Processing Multimedia Content, MLMM'05, Bonn, Germany, August 2005.
117. T. I. Alecu, P. Missonnier, S. Voloshynovskiy, P. Giannakopoulos, and T. Pun, *Soft/hard focalization in the EEG inverse problem*, IEEE Workshop on Statistical Signal Processing (SSP '05), Bordeaux, France, July 17-20, 2005.
118. Y. Rytsar, S. Voloshynovskiy, O. Koval, F. Deguillaume, S. Startchik, and T. Pun, *Document interactive navigation in multimodal databases*, MLMI'05, 2nd Joint Workshop on Multimodal Interaction and Related Machine Learning Algorithms, 11-13 July 2005, Edinburgh, UK.
119. B. Janvier, E. Bruno, S. Marchand-Maillet, and T. Pun, *Semantic segmentation of video collections using boosted random fields* MLMI'05, 2nd Joint Workshop on Multimodal Interaction and Related Machine Learning Algorithms, 11-13 July 2005, Edinburgh, UK.
120. F. Deguillaume, Y. Rytsar, S. Voloshynovskiy, and T. Pun, *Data-hiding based text document security and automatic processing*, IEEE Int. Conf. on Multimedia & Expo(ICME) 2005, July 6-8, 2005, Amsterdam, The Netherlands.
121. J. Kronegg, S. Voloshynovskiy, T. Pun, *Analysis of bit-rate definitions for Brain-computer Interfaces*, The 2005 International Conference on Human-Computer Interaction (HCI'05), June 20-23, 2005, Las Vegas, USA.
122. E. Topak, S. Voloshinovskiy, J. Vila-Forcen, T. Pun, *On Security of geometrically robust data-hiding*, WIAMIS'05, Workshop on Image Analysis for Multimedia Interactive Services, Montreux, Switzerland, April 13-15, 2005 (invited presentation).
123. S. Kosinov, S. Marchand-Maillet and Thierry Pun, *Countering the false positive projection effect in asymmetric classification*, 29th annual conference of the Gesellschaft fr Klassifikation, Magdeburg, Germany, March 2005.
124. J. Vila-Forcen, S. Voloshynovskiy, O. Koval, F. Perez-Gonzalez, T. Pun, *Worst case additive attack against quantization-based watermarking techniques: joint study of probability of error and mutual information*, Paper 5681-14, Special Session on Security, Steganography, and Watermarking of Multimedia Contents VII, Electronic Imaging IS&T SPIE 2005, San Jose, CA, USA January 16-20, 2005.
125. O. Koval, S. Voloshynovskiy, F. Deguillaume, F. Perez-Gonzalez, and T. Pun, *Robustness improvement of known-host-state watermarking using host statistics*, Paper 5681-57, Special Session on Security, Steganography, and Watermarking of Multimedia Contents VII, Electronic Imaging IS&T SPIE 2005, San Jose, CA, USA January 16-20, 2005.
126. E. Topak, S. Voloshynovskiy, O. Koval, K. Mihcak, T. Pun, *Security analysis of robust data-hiding with geometrically structured codebooks*, Paper 5681-70, Special Session on Security, Steganography, and Watermarking of Multimedia Contents VII, Electronic Imaging IS&T SPIE 2005, San Jose, CA, USA January 16-20, 2005.
127. R. Villan, S. Voloshynovskiy, O. Koval, T. Pun, *Multilevel 2D bar codes: towards high capacity storage modules for multimedia security and management*, Paper 5681-46, Special Session on Security, Steganography, and Watermarking of Multimedia Contents VII, Electronic Imaging IS&T SPIE 2005, San Jose, CA, USA January 16-20, 2005.
128. O. Koval, S. Voloshynovskiy, F. Perez-Gonzalez, F. Deguillaume, and T. Pun, *Quantization-based watermarking performance improvement using host statistics: additive noise attack*, ACM Multimedia and Security Workshop, Magdeburg, Germany, September 20-21, 2004.
129. J. Vila Forcen, S. Voloshynovskiy, O. Koval, F. Pereira Gonzalez, T. Pun, *Worst case additive attack against quantization-based watermarking techniques*, IEEE Int. Workshop on Multimedia Signal Processing, MMSP 2004, Sept. 29 - Oct. 1, 2004, Siena, Italy.
130. S. Voloshynovskiy, O. Koval, F. Perez-Gonzalez, T. Pun, *Quantization based watermarking performance improvement using host statistics: AWGN attack case*, ACM Multimedia and Security Workshop 2004, Sept. 20-21, Magdeburg, Germany.

131. O. Koval, S. Voloshynovskiy, F. Perez-Gonzalez, F. Deguillaume, T. Pun, *Spread-spectrum watermarking for real images: is everything so hopeless?*, EUSIPCO-2004, 12th Eur. Signal Proc. Conf., Sept. 7-10, 2004, Vienna, Austria.
132. E. Topak, S. Voloshynovskiy, O. Koval, T. Pun, *Capacity-security analysis of repetitive watermarking*, EUSIPCO-2004, 12th Eur. Signal Proc. Conf., Sept. 7-10, 2004, Vienna, Austria.
133. T. I. Alecu, S. Voloshynovskiy, T. Pun, *Localization properties of an EEG sensor system: lower bounds and optimality*, EUSIPCO-2004, 12th Eur. Signal Proc. Conf., Sept. 7-10, 2004, Vienna, Austria.
134. T. I. Alecu, S. Voloshynovskiy, T. Pun, *Regularized two-step brain activity reconstruction from spatio-temporal EEG data*, SPIE Int. Symp. Optical Science and Technol., Conf. Image Reconstruction from Incomplete Data III (AM320), 2-6 August 2004, Denver, Colorado, USA.
135. S. Kosinov, S. Marchand-Maillet, T. Pun, *Visual object categorization using distance-based discriminant analysis*, 4th Int. Workshop on Multimedia Data and Document Engineering (MDDE-04), July 2nd 2004, In conjunction with IEEE Computer Society Conference on Computer Vision and Pattern Recognition, CVPR 2004, Washington, DC, USA, 27th June - 2nd July, 2004.
136. T. I. Alecu, S. Voloshynovskiy, T. Pun, *EEG cortical imaging: a vector field approach for Laplacian denoising and missing data estimation*, ISBI 2004, 2004 IEEE International Symposium on Biomedical Imaging: From Nano to Macro, April 15-18, 2004, Arlington, VA, USA.
137. S. Kosinov, S. Marchand-Maillet, T. Pun, *Multimedia autoannotation via hierarchical semantic ensembles*, Proceedings of the Int. Workshop on Learning for Adaptable Visual Systems (LAVS 2004), Cambridge, UK, 2004.
138. S. Kosinov, S. Marchand-Maillet, T. Pun, *Iterative majorization approach to distance-based discriminant analysis*, in: Classification: The Ubiquitous Challenge (Gesellschaft fr Klassifikation, GfKI'04), Dortmund, Germany, March 9-11, 2004.
139. F. Deguillaume, S. Voloshynovskiy, T. Pun, *Securing authentication documents with multimodal biometrics integrated with data hiding techniques*, Biometric Technology for Human Identification, A.K. Jain, N.K. Ratha, Chairs, SPIE Defense and Security Symposium 2004, Formerly AeroSense, Orlando, FL, USA, 12-16 April 2004, paper 5404-63.
140. S. Voloshynovskiy, O. Koval, F. Deguillaume and T. Pun, *Visual communications with side information via distributed printing channels: extended multimedia and security perspectives*, Conf. on Security, Steganography, and Watermarking of Multimedia Contents VI, Special session "Document security", S. Voloshynovskiy, chair, part of the IST/SPIE Symposium on Electronic Imaging 2004, Jan 18-22, 2004, San Jose, CA, USA, paper EI 5306-43.
141. Y. Rytsar, S. Voloshynovskiy, F. Ehrler, T. Pun, *Interactive segmentation with hidden object-based annotations: toward smart media*, SPIE Electronic Imaging 2004, Storage and Retrieval Methods and Applications for Multimedia, San Jose, CA, USA, Jan. 24-29, 2004, paper EI 5307-04.
142. Y. Rytsar, S. Voloshynovskiy, T. Pun, *Metadata representation for semantic-based multimedia security and management*, Workshop on Metadata for Security, Intl. Federated Conferences (OTM '03), Nov. 3-7, 2003, Catania, Sicily, Italy, Springer-Verlag Lecture Notes in Computer Science, Vol. 2889/2003, 769-778.
143. S. Voloshynovskiy, F. Deguillaume, O. Koval, T. Pun, *Information theoretic data hiding for public network security, services control and secure communications*, TELSIKS 2003, 6th Int. Conf. on Telecommunications in Modern Satellite, Cable and Broadcasting Services, Oct. 1-4, 2003, Nis, Yugoslavia (invited paper).
144. B. Janvier, E. Bruno, S. Marchand-Maillet, T. Pun, *Information-theoretic framework for the joint temporal partitioning and representation of video data*, CBMI'03, 3rd Int. Workshop on Content-Based Multimedia Indexing, September 22-24, 2003, IRISA, Rennes, France.
145. P. Roth, T. Pun, *A multimodal system for the non-visual exploration of digital pictures*, Interact 2003, "Bringing the Bits togETHER", 9th ICIP TC13 Int. Conf. on Human-Computer Interaction, Sept. 1-5, 2003, Zuerich, Switzerland.
146. P. Roth, J. Kronegg, T. Pun, *Rendering digital images accessible for blind computer users*, HCI International 2003, 10th International Conference on Human-Computer Interaction, June 22-27, 2003, Crete, Greece.
147. J. Kronegg, T. Alecu, T. Pun, *Information theoretic bit-rate optimization for average trial protocol Brain-Computer Interfaces*, HCI International 2003, 10th International Conference on Human-Computer Interaction, June 22-27, 2003, Crete, Greece.
148. R. Grave de Peralta Menendez, S. Gonzalez Andino, J. Millan, T. Pun, C. M. Michel, *Direct non-invasive brain computer interfaces*, Human Brain Mapping 2003, June 18-22, 2003, New York, USA.

149. S. Voloshynovskiy, O. Koval, F. Deguillaume, and T. Pun, *Data hiding capacity analysis for real images based on stochastic non-stationary geometrical models*, Proceedings of SPIE Photonics West, Electronic Imaging 2003, Security and Watermarking of Multimedia Contents V, E. J. Delp, P. W. Wong, Eds., 20-24 Jan. 2003, Santa Clara, USA, paper 5020-60.
150. S. Voloshynovskiy, O. Koval and T. Pun, *Wavelet-based image denoising using non-stationary stochastic geometrical image priors*, Proceedings of SPIE Photonics West, Electronic Imaging 2003, Image and Video Communications and Processing, B. Vasudev, T. Russell Hsing, A. G. Tescher, T. Ebrahimi, Eds., 20-24 Jan. 2003, Santa Clara, USA, paper 5022-81.
151. F. Deguillaume, S. Voloshynovskiy, T. Pun, *Hybrid robust and tamperproofing watermarking resistant against copy-attack*, EUSIPCO-2002, XI European Signal Processing Conference, September 3-6, 2002, Toulouse, France.
152. S. Voloshynovskiy, T. Pun, *Capacity-security analysis of data hiding technologies*, Special Session "Benchmarking of data hiding technologies", S. Voloshynovskiy, T. Pun, B. Macq, IEEE International Conference on Multimedia and Expo (ICME), Lausanne, Switzerland, August 26-29, 2002.
153. F. Deguillaume, S. Voloshynovskiy, T. Pun, *Hybrid robust and tamperproofing watermarking resistant against copy-attack*, EUSIPCO-2002, XI European Signal Processing Conference, September 3-6, 2002, Toulouse, France.
154. H.Mller, S. Marchand-Maillet, T. Pun, *The truth about the Corel image collection - evaluation in image retrieval*, CIVR2002, Int. Conf. on Image and Video Retrieval, The Challenge of Image and Video Retrieval, July 18-19, 2002, British Library Conference Centre, London, UK.
155. S. Voloshynovskiy, A. Herrigel, Y. Ritsar, T. Pun, *StegoWall: blind statistical detection of hidden data*, SPIE Photonics West, Electronic Imaging 2002, Security and Watermarking of Multimedia Contents IV, E.J. Delp, P. W. Wong, Eds., Special Session on Steganalysis, J. Fridrich, Ed., San Jose, CA, USA, 20-25 January 2002, paper 4675-07.
156. F. Deguillaume, S. Voloshynovskiy, T. Pun, *A method for the estimation and recovering from general affine transforms in digital watermarking applications*, SPIE Photonics West, Electronic Imaging 2002, Security and Watermarking of Multimedia Contents IV, E.J. Delp, P. W. Wong, Eds., San Jose, CA, USA, 20-25 January 2002, paper 4675-34.
157. H.Mller, W. Mller, S. Marchand-Maillet, T. Pun, D. McG. Squire, *A web-based evaluation system for content-based image retrieval*, ACM Multimedia, MIR 2001 - 3rd Intl Workshop on Multimedia Information Retrieval, Sept. 30-Oct. 5, 2001, Ottawa, Canada.
158. S. Voloshynovskiy, F. Deguillaume, T. Pun, *Multibit digital watermarking robust against local non-linear geometrical transformations*, ICIP 2001, Int. Conf. Image Processing, Thessaloniki, Greece, October 07-10, 2001.
159. H.Mller, W. Mller, S. Marchand-Maillet, D. McG. Squire, T. Pun, *Automatic benchmarking in content-based image retrieval*, IEEE ICME2001, International Conference on Multimedia and Expo, August 22-25, 2001, Waseda University, Tokyo, Japan.
160. P. Roth, D. Richoiz, L. Petrucci, T. Pun, *An audio haptic tool for non-visual image representation*, IEEE/ISSPA ISSPA 2001, 6th Int. Symposium on Signal Processing and its Applications, M. Deriche, N. Shaikh-Husin, J. Kamisian, Eds., Special Session: Enhanced user interfaces for non-visual image display, 13-16 August 2001, Kuala-Lumpur, Malaysia.
161. S. Voloshynovskiy, T. Pun, *Stochastic digital image watermarking*, IEEE/ISSPA ISSPA 2001, 6th Int. Symposium on Signal Processing and its Applications, M. Deriche, N. Shaikh-Husin, J. Kamisian, Eds., 13-16 August 2001, Kuala-Lumpur, Malaysia (T. Pun, invited plenary lecture).
162. S. Voloshynovskiy, A. Herrigel, T. Pun, *Blur/deblur attack against document protection systems based on digital watermarking*, Information Hiding Workshop, Pittsburgh, PA, USA, 25-27 April 2001. Published also in: Lecture Notes in Computer Science, Ira S. Moskowitz, Ed., Springer, 330-339.
163. S. Pereira, S. Voloshynovskiy, M. Madueno, S. Marchand-Maillet, T. Pun, *Second generation benchmarking and application oriented evaluation*, Information Hiding Workshop, Pittsburgh, PA, USA, 25-27 April 2001. Published also in: Lecture Notes in Computer Science, Ira S. Moskowitz, Ed., Springer, 340-353.
164. P. Roth, C. Giess, L. Petrucci, T. Pun, *Adapting haptic game devices for non-visual graph rendering*, HCI International 2001: 9th Int. Conf. on Human-Computer Interaction, August 5-10, 2001, New Orleans, LA, USA.
165. S. Voloshynovskiy, F. Deguillaume, S. Pereira, T. Pun, *Optimal adaptive diversity watermarking with channel state estimation*, SPIE Photonics West, Electronic Imaging 2001, Security and Watermarking of Multimedia Contents III, P. W. Wong, E. J. Delp, Eds., paper 4314-74, San Jose, CA, USA, 21-26 January 2001.



166. W. Mller, H. Mller, S. Marchand-Maillet, T. Pun, D. McG. Squire, Z. Pecenovc, C. Giess, A. P. de Vries, *MRML: An extensible communication protocol for interoperability and benchmarking of multimedia information retrieval systems*, SPIE Photonics East, Int. Symp. on Voice, Video, and Data Communications, Boston, Mass., 5 - 8 November, 2000.
167. W. Mller, S. Marchand-Maillet, H. Mller, T. Pun, *Towards a fair benchmark for image databases browsers*, SPIE Photonics East, Int. Symp. on Voice, Video, and Data Communications, Boston, Mass., 5 - 8 November, 2000.
168. W. Mller, H. Mller, S. Marchand-Maillet, T. Pun, D. McG. Squire, Z. Pecenovc, C. Giess, A. P. de Vries, *MRML: A communication protocol for content-based image retrieval*, in Proc. Visual 2000, 4th Int. Conf. on Advances in Visual Information systems, R. Laurini, Ed., 2-4 Nov. 2000, Lyon, France, 300-311.
169. S. Pereira, S. Voloshynovskiy, T. Pun, *Effective channel coding for DCT watermarks*, ICIP 2000, IEEE Int. Conf. on Image Processing, Vancouver, CA, Sept. 10-13, 2000.
170. S. Voloshynovskiy, F. Deguillaume, T. Pun, *Content adaptive watermarking based on a stochastic multiresolution image modeling*, EUSIPCO-2000, Sept. 5-8, 2000, Tampere, Finland.
171. S. Pereira, T. Pun, *A framework for optimal adaptive DCT watermarks*, EUSIPCO-2000, Sept. 5-8, 2000, Tampere, Finland.
172. H. Mller, W. Mller, S. Marchand-Maillet, T. Pun, D. McG. Squire, *Strategies for positive and negative relevance feedback in image retrieval*, in Proc. 15th ICPR, Int. Conf. on Pattern Recognition, Vol. 1, Computer Vision and Image Analysis, A. Sanfeliu, J.J. Villanueva, M. Vanrell, R. Alquezar, J.-O. Eklundh, Y. Aloimonos, Eds., Barcelona, Spain, 3-8 Sept. 2000, 1043-1046.
173. H. Mller, W. Mller, S. Marchand-Maillet, T. Pun, D. McG. Squire, *Learning feature weights from user behavior in content-based image retrieval*, Sixth ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining, 5th. Int. Wk. Multimedia Data Mining, MDM/KDD 2000, S.J. Simoff, O.R. Zaiane, Eds., August 20-23, 2000, Boston, MA, USA, 67-72.
174. P. Roth, L. Petrucci, A. Assimacopoulos, T. Pun, *"From Dots to Shapes": an auditory haptic game platform for teaching geometry to blind pupils*, Proc. ICCHP 2000, Int. Conf. on Computers helping people with special needs, Karlsruhe, Germany, July 17 - 21, 2000, 603-610.
175. W. Mller, H. Mller, S. Marchand-Maillet, T. Pun, D. McG. Squire, Z. Pecenovc, C. Giess, A. P. de Vries, *MRML: A communication protocol for content-based multi-media retrieval*, Proposal, ISO/IEC JTC1/SC29/WG11, MPEG00/M6099, Int. Organiz. for Standardization, Coding of Moving Pictures and Associated Audio, Geneva, May 30 - June 2, 2000.
176. S. Pereira, S. Voloshynovsky and T. Pun, *Optimized wavelet domain watermark embedding strategy using linear programming*, AeroSense, SPIE's 14th Annual International Symposium on Aerospace/Defense Sensing, Simulation and Controls, 24-28 April 2000 - Orlando, Florida USA, Wavelet Applications VII (or17), H. H. Szu, M. Vetterli, eds. (paper 4056-34).
177. H. Mller, W. Mller, D. Squire, Z. Pecenovc, S. Marchand-Maillet, T. Pun, *An open framework for distributed multimedia retrieval*, Proc. RIAO 2000, Content-Based Multimedia Information Access, Paris, April 12-14, 2000, Vol. 1, 701-712.
178. L. S. Petrucci, E. Harth, P. Roth, A. Assimacopoulos, T. Pun, *Websound: a generic Web sonification tool, and its application to an auditory Web browser for blind and visually impaired users*, ICAD 2000, 6th Int. Conf. on Auditory Display, Georgia Inst. Technology, Atlanta, Georgia USA, April 2-5, 2000.
179. L. S. Petrucci, E. Harth, P. Roth, A. Assimacopoulos, T. Pun, *Websound: a generic Web sonification tool allowing CHI researchers to dynamically create new access modalities*, CHI 2000, Int. Conf. on Human Factors in Computing Systems, The Hague, Netherlands, April 1-6, 2000.
180. P. Roth, L. Petrucci, A. Assimacopoulos, T. Pun, *Audio-haptic Internet browser and associated tools for blind and visually impaired computer users*, COST 254 Intelligent Terminals, Proc. Workshop Friendly Exchanging Through the Net, C. Germain, O. Lavialle, E. Grivel, Eds., Bordeaux, France, March 22-24, 2000, 57-62 (invited presentation by Thierry Pun).
181. P. Roth, L. Petrucci, A. Assimacopoulos, T. Pun, *Concentration game: an audio adaptation for blind people*, CSUN's 15th Annual Int. Conf. "Technology and Persons with Disabilities", March 20-25, 2000, Los Angeles, CA, USA (<http://www.csun.edu/cod/conf2000/proceedings/0011Roth.html>).

182. S. Voloshynovskiy, S. Pereira, A. Herrigel, N. Baumgartner, T. Pun, *Generalized watermarking attack based on watermark estimation and perceptual remodulation*, IS&T / SPIE 12th Ann. Symp. Electronic Imaging 2000, Security and Watermarking of Multimedia Content II, EI 3971-34, P. Wah Wong, E.J. Delp, Eds., 23-28 Jan. 2000, San Jose, CA, USA.
183. F. Deguillaume, G. Csurka, T. Pun, *Countermeasures for unintentional and intentional video watermarking attacks*, IS&T / SPIE 12th Ann. Symp. Electronic Imaging 2000, Security and Watermarking of Multimedia Content II, EI 3971-33, P. Wah Wong, E.J. Delp, Eds., 23-28 Jan. 2000, San Jose, CA, USA.
184. S. Voloshynovskiy, A. Herrigel, F. Jordan, N. Baumgaertner, T. Pun, *A noise removal attack for watermarked images*, Multimedia and Security Workshop, Oct. 30-31, 1999, J. Dittmann, K. Nahrstedt and P. Wohlmacher, Eds., part of the 7th ACM Multimedia Conference (Multimedia 99), Orlando, Florida, USA, Oct. 30 - Nov. 4, 1999, 71-80.
185. S. Voloshynovskiy, S. Pereira, T. Pun, *Watermark attacks*, Erlangen Watermarking Workshop, Oct. 5-6, 1999, Erlangen, Germany (invited presentation, talk by T. Pun).
186. S. Pereira and T. Pun, *Fast robust template matching for affine resistant image watermarking*, Int. Workshop on Information Hiding, Dresden, Germany, Sept. 29 - Oct. 1, 1999, Lecture Notes in Computer Science, LNCS 1768, 2000, 200-210.
187. G. Csurka, F. Deguillaume, J. J. K. Ó Ruanaidh and T. Pun, *A Bayesian approach to affine transformation resistant image and video watermarking*, Int. Workshop on Information Hiding, Dresden, Germany, Sept. 29 - Oct. 1, 1999, Lecture Notes in Computer Science, LNCS 1768, 270-285.
188. S. Voloshynovskiy, A. Herrigel, N. Baumgartner, T. Pun, *Stochastic approach to content adaptive digital image watermarking*, Int. Workshop on Information Hiding, Dresden, Germany, Sept. 29 - Oct. 1, 1999, Lecture Notes in Computer Science, LNCS 1768, 212-236.
189. G. Csurka, F. Deguillaume, J. J. K. Ó Ruanaidh et T. Pun, *Tatouage d'images basé sur la Transformée de Fourier discrète*, CORESA 1999, 5è Journées d'Etudes et d'Echanges "Compression et Représentation des Signaux Audio-visuels", 14-15 juin 1999, Sophia-Antipolis, France.
190. H. Mller, D. Squire, W. Mller, T. Pun, *Efficient access methods for content-based image retrieval with inverted files*, SPIE Photonics East, Int. Symposium Voice, Video, and Data Communications, Conf. on Multimedia Storage and Archiving Systems IV (VV02), 3846-47, S. Panchanathan, S. F. Chang, and C.-C. Jay Kuo, Eds., Sept. 19-22, 1999, Boston, Mass., USA.
191. W. Mller, D. Squire, H. Mller, T. Pun, *Hunting moving targets: an extension to Bayesian retrieval methods in multimedia databases*, SPIE Photonics East, Int. Symposium Voice, Video, and Data Communications, Conf. on Multimedia Storage and Archiving Systems IV (VV02), 3846-34, S. Panchanathan, S. F. Chang, and C.-C. Jay Kuo, Eds., Sept. 19-22, 1999, Boston, Mass., USA.
192. L. Petrucci, P. Roth, A. Assimacopoulos, T. Pun, *An audio browser for increasing access to World Wide Web sites for blind and visually impaired computer users*, 8th Int. Conference on Human-Computer Interaction, HCI 99, August 22-27, 1999, Munich, Germany.
193. S. Pereira, J. O'Ruanaidh, F. Deguillaume, G. Csurka, T. Pun, *Template based recovery of Fourier-based watermarks using log-polar and log-log maps*, IEEE Multimedia Systems 99, Int. Conf. on Multimedia Computing and Systems, June 7-11, 1999, Florence, Italy.
194. P. Roth, L. Petrucci, A. Assimacopoulos, T. Pun, *Auditory browser for blind and visually impaired users*, ACM SIGCHI Computer Human Interaction 99, Conference on Human Factors in Computing Systems, Pittsburgh, PA, USA, May 15-20, 1999, 218-219.
195. F. Deguillaume, G. Csurka, J. O'Ruanaidh, T. Pun, *Robust 3D DFT video watermarking*, IS&T / SPIE 11th Ann. Symp. Electronic Imaging 99, Conf. on Multimedia Processing and Applications - Security and Watermarking of Multimedia Content, vol. 3657, P. Wah Wong, E.J. Delp, Eds., paper EI 3657-13, 113-124, 23-29 Jan. 1999, San Jose, CA, USA.
196. S. Pereira, J. O'Ruanaidh, T. Pun, *Secure robust digital watermarking using the Lapped Orthogonal Transform*, IS&T / SPIE 11th Ann. Symp. Electronic Imaging 99, Conf. on Multimedia Processing and Applications - Security and Watermarking of Multimedia Content, vol. 3657, P. Wah Wong, E.J. Delp, Eds., paper EI 3657-03, 21-30, 23-29 Jan. 1999, San Jose, CA, USA.
197. R. Milanese, M. Cherbuliez, and T. Pun, *Invariant content-based image retrieval using the Fourier-Mellin transform*, ICAPR 98, Int. Conf. on Advances in Pattern Recognition, S. Singh, Ed., Springer, 1999, 73-82 (Plymouth, UK, 23-25 Nov. 1998).

198. P. Roth, L. Petrucci, A. Assimacopoulos, T. Pun, *AB-Web: Active audio browser for visually impaired and blind users*, ICAD 98, Int. Conf. on Auditory Display, Glasgow, UK, Nov. 1-4, 1998.
199. T. Pun, P. Roth, L. Petrucci, A. Assimacopoulos, *An image-capable audio internet browser for facilitating blind user access to digital libraries*, Digital Libraries '98 - The Third ACM Conference on Digital Libraries, Pittsburgh, PA, USA, June 23-26, 1998.
200. S. Startchik, R. Milanese, T. Pun, *Projective and illumination invariant representation of disjoint shapes*, Computer Vision - ECCV 98, H. Burkhardt and B. Neumann, Eds., Lecture Notes in Computer Science, 1406, Vol. I, Springer-Verlag, 264-280 (Proc. 5th Europ. Conf. Comp. Vision, June 2-6, 1998, Freiburg, Germany).
201. A. Herrigel, J.J.K. Ó Ruanaidh, H. Petersen, S. Pereira and T. Pun, *Secure copyright protection techniques for digital images*, in: Information Hiding, David Aucksmith, Ed., Lecture Notes in Computer Science, Vol. 1525, Springer, Berlin, Proc. Second Int. Workshop on Information Hiding IH'98, Portland, OR, USA, April. 15-17, 1998, 169-190.
202. C. Rauber, T. Pun, P. Tschudin, *Retrieval of images from a library of watermarks for ancient paper identification*, Proc. EVA 97, Elektronische Bildverarbeitung und Kunst, Kultur, Historie, V14, Berlin, Germany, Nov. 12 - 14, 1997 (published by: GFaI, Gesellschaft zur Foerderung angewandter Informatik e.V.).
203. J. Ó Ruanaidh and T. Pun, *Rotation, scale and translation invariant digital image watermarking*, Proc. ICIP 97, IEEE Int. Conf. on Image Processing, Santa Barbara, CA, USA, Oct. 26-29, 1997, 536-539.
204. C. Rauber, J. Ó Ruanaidh, T. Pun, *Secure distribution of watermarked images for a digital library of ancient papers*, Second ACM Conf. on Digital Libraries, Philadelphia, PA, July 23-26, 1997, 123-130.
205. S. Gil, R. Milanese, T. Pun, *Motion estimates combination for object tracking*, Proc. 30th ISATA, Symp. on Automotive Technology and Automation, Topical Track on Robotics, Motion and Machine Vision in the Automotive Industry, Florence, Italy, June 16-19, 1997, 109-117.
206. D. McG. Squire, T. Pun, *A comparison of human and machine assessments of image similarity for the organization of image databases*, SCIA 97, 10th Scandinavian Conf. on Image Analysis, M. Frydrych, J. Parkkinen, A. Visa, Eds., Lappeenranta, Finland, June 9-11, 1997, 51-57.
207. R. Milanese, D. Squire and T. Pun, *Correspondence analysis and hierarchical indexing for content based image retrieval*, ICIP'96, IEEE Int. Conf. on Image Processing, Lausanne, Switzerland, Sept. 16-19, 1996, III.859-862.
208. C. Rauber, P. Tschudin, S. Startchik, T. Pun, *Archival and retrieval of historical watermark images*, Special Session "Images in Digital Libraries", ICIP'96, IEEE Int. Conf. on Image Processing, Lausanne, Switzerland, Sept. 16-19, 1996, II.773-776.
209. S. Startchik, R. Milanese, C. Rauber and T. Pun, *Planar shape databases with affine invariant search*, Proc. First IAPR Int. Workshop on Image Databases and Multi-Media Search, IDB-MMS'96, 22-23 August 1996, Amsterdam, NL, 202-209.  
Also published in: Image Databases and Multi-media search, A.W.M. Smeulders, R. Jain, Eds., Series on Software Engineering and Knowledge Engineering, S.K. Chang, Ed., World Scientific, 1997, 285-292.
210. C. Rauber, P. Tschudin, S. Startchik, T. Pun, *Archivage et recherche d'images de filigranes*, CNED'96, 4e Coll. National sur l'Écrit et le Document, Nantes, France, July 3-5, 1996, 69-76.
211. S. Gil, R. Milanese, T. Pun, *Combining multiple motion estimates for vehicle tracking*, Computer Vision - ECCV 96, B. Buxton, R. Cipolla, Eds., Lecture Notes in Computer Science, 1064, Vol. II, Springer-Verlag, 307-320 (Proc. 4th Europ. Conf. Comp. Vision, April 14-18, 1996, Cambridge, UK).
212. C. Rauber, C. De Garrini, R. Milanese, S. Startchik, T. Pun, *Saillance, zone d'intérêt, mise en correspondance: trois techniques pour la localisation et la reconnaissance d'objets en couleur sur fond fortement texturé*, Proc. 15th GRETSI Symposium on Signal and Image Processing, Juan-les-Pins, 18-21 Sept. 1995, 709-712.
213. T. Pun, C. Rauber, S. Startchik, R. Milanese, *Transforming an image into dataflows of relevant primitives for objects location, reconstruction and indexing*, Proc. Vision Interface 95, Canadian Image Processing and Pattern Recognition Soc., Quebec City, Canada, May 15-19, 1995, 203-211 (presented by Ch. Rauber).
214. S. Startchik, C. Rauber, T. Pun, *Recognition of planar objects over complex backgrounds using line invariants and relevance measures*, GMICV 95', Proc. Workshop on Geometric Modeling and Invariance for Computer Vision, R. Mohr and W. Chengke, Eds., Xi'an, China, April 27-29, 1995, Xidian University Press, 301-306.
215. T. Pun and R. Milanese, *Computer vision and multimedia information systems*, Proc. International Workshop on Multimedia Information Systems and Hypermedia, M. Sakauchi and R. Jain, Eds., Tokyo, Japan, March 23-24, 1995, 29-37 (invited).

216. T. Zimmerman, C. Baur, E. Natonek, T. Pun, M. Lefebvre, *The Potato Operation: robotics apparatus using active vision for automatic potato pulp sampling*, 4th. Int. Conf. on Automation, Robotics and Artificial Intelligence applied to Analytical Chemistry and Laboratory Medicine, Montreux, Switzerland, Feb. 7-10, 1995.
217. T. Pun, J.-M. Bost, R. Milanese, C. Rauber, S. Startchik, *Selecting relevant information and delaying irrelevant data for objects recognition*, AAAI Fall Symposium Series, Relevance Workshop, New Orleans, Louisiana, 4-6 Nov. 1994, 168-172.
218. S. Gil, R. Milanese, T. Pun, *Feature selection for object tracking in traffic scenes*, Proc. SPIE, Intelligent Vehicle Highway Systems, R. J. Becherer, Ed., Vol. 2344, 1994, 253-266 (Conf. SPIE, Photonic Sensors and Controls for Commercial Applications - Intelligent Vehicle Highway Systems, Boston, USA, Nov. 2-4, 1994).
219. M. Lefebvre, T. Zimmerman, C. Baur, P. Gugerli, T. Pun, *Potato operation: Automatic detection of potato diseases*, SPIE, Photonic Sensors and Controls for Commercial Applications - Agriculture, Forestry and Biological Processing, Boston, USA, Oct. 31 - Nov. 4, 1994, 65-72.
220. R. Milanese, T. Pun, H. Wechsler, *Integration of bottom-up and top-down information for visual attention*, 4th AI\*IA Congress, Workshop on Perception and Robotics, Parma, IT, Sept. 26-28, 1994.
221. R. Milanese, T. Pun, S. Gil, J.-M. Bost, *Exploiting dynamic aspects of visual perception for objects recognition*, PerAc 94, From Perception to Action, Lausanne, Switzerland, September 7-9, 1994 (paper presented by T. Pun); IEEE Comp. Soc. Press, Los Alamitos, CA, 1994, 193-205.
222. R. Milanese, H. Wechsler, S. Gil, J.-M. Bost, T. Pun, *Integration of bottom-up and top-down cues for visual attention using non-linear relaxation*, IEEE - CVPR 94 (Computer Vision and Pattern Recognition), Seattle, Washington, June 20-23, 1994, 781-785 (IEEE Computer Soc. Press).
223. L. Chachere and T. Pun, *Extracting a domain theory from natural language to construct a knowledge base for visual recognition*, AAAI Fall Symposium Series: Machine Learning in Computer Vision: What, Why and How?, Raleigh, NC, Oct. 22-24, 1993, AAAI Press, Menlo Park, CA, Techn. Rep. FS-93-04, 85-89.
224. J.-M. Bost, R. Milanese and T. Pun, *Transforming an image into a data-flow for visual indexing*, Proc. 7th Int. Conf. on Image Analysis and Processing, S. Impedovo, Ed., Capitolo, Monopoli, Italy, Sept. 20-22, 1993. Published by World Scientific, S. Impedovo, Ed., 1994, 298-301.
225. S. Gil, T. Pun, *Multiresolution alerting for motion detection*, Proc. 14eme GRETSI Symposium on Signal and Image Processing, Juan-les-Pins, 13-16 Sept. 1993, 903-906.
226. J.-M. Bost, R. Milanese and T. Pun, *Temporal precedence in asynchronous visual indexing*, Proc. 5th Int. Conf. on Computer Analysis of Images and Patterns (CAIP'93), Budapest, Hungary, Sept. 13-15, 1993, 468-475 (D. Chetverikov and W.G. Kropatsch, Eds., Springer-Verlag, Lecture Notes in C.S. 719, 1993).
227. S. Gil, T. Pun, *Non-linear multiresolution relaxation for alerting*, Proc. 11th Europ. Conf. on Circuit Theory and Design, H. Dedieu, Ed., Davos, Switzerland, 30 Aug. - Sept. 3, 1993, 1639-1644.
228. M. Lefebvre, S. Gil, C. Baur, J.-D. Dessimoz, T. Pun, *The Potato Operation: computer vision for agricultural robotics and quality control*, Proc. 4th Int. Symp. on Fruit, Nut and Vegetable Production Engineering, Valencia, Spain, March 21-27, 1993, 1-8.
229. C. Baur, E. Natonek, T. Pun, *The Potato Operation: robotic apparatus for handling and testing natural objects*, Proc. 4th Int. Symp. on Fruit, Nut and Vegetable Production Engineering, Valencia, Spain, March 21-27, 1993, 1-8.
230. R. Milanese, T. Pun, H. Wechsler, *A bottom-up attention system for active vision*, Second Workshop on Perception, AI\*IA (Associazione Italiana per l'Intelligenza Artificiale), Trieste, 28-30 Oct. 1992.
231. J.-D. Dessimoz, P.-A. Schüpbach, A. Mercier and T. Pun, *Choosing a robot versus another automated system*, Proc. 23rd Int. Symp. on Industrial Robots, Barcelona, Spain, 6-9 October, 1992, 661-666.
232. T. Pun, *2D and 3D graphical methods: applications in medical imaging*, Invited lecture, 4th Int. Conf. on Applications of Physics in Medicine and Biology - Advanced Detectors for Medical Imaging, Trieste, Italy, Sept. 21-25, 1992.
233. A. Jacot-Descombes, M. Rupp, T. Pun, *LaboImage 4.0: portable window-based environment for research in image processing and analysis*, MEDINFO 92, 7th World Congress on Medical Informatics, Geneva, Switzerland, September 6-10, 1992.

234. M. Lefebvre, S. Gil, M.-A. Glassey, C. Baur, T. Pun, *3D computer vision for agrotics: the Potato Operation, an overview*, 11th IAPR - Computer Vision and Applications, The Hague, The Netherlands, August 30 - September 3, 1992, 207-210.
235. S. Gil, M. Lefebvre, M.-A. Glassey, C. Baur, T. Pun, *3D Image analysis for agricultural robotics: the Potato Operation*, EUSIPCO 92, 6th European Signal Processing Conference, Brussels, Belgium, 25-28 August 1992, 1781-1784.
236. R. Milanese, J.-M. Bost, T. Pun, *A bottom-up attention system for active vision*, Proc. ECAI 92, 10th. Europ. Conf. on Artificial Intelligence, Vienna, August 3-7, 1992, B. Neumann, Ed., J. Wiley and Sons, 808-810.
237. R. Milanese, J.-M. Bost, T. Pun, *A relaxation network for a feature-driven visual attention system*, SPIE, Vol. 1766, Neural and Stochastic Methods in Image and Signal Processing, 1992, 542-552. (Proc. SPIE Conf. on Application of Digital Image Processing XV, Neural and Stochastic Methods in Image and Signal Processing, San Diego, CA, July 20-24, 1992.)
238. J.-D. Dessimoz, P.-A. Schüpbach, A. Mercier and T. Pun, *Do I need a robot or a non-robot automated system?*, Proc. 1992 IEEE/RSJ Conf. on Intelligent Robots and Systems, July 7-10, 1992, Raleigh, North Carolina, USA, 1161-1168.
239. A. Jacot-Descombes and T. Pun, *A probabilistic approach to 3-D inference of geons from a 2-D view*, SPIE Vol. 1708, Applications of Artificial Intelligence X: Machine Vision and Robotics, 1992, 579-588. (Special Session on: Recognition by Components or Geon-Based Systems, Orlando, Florida, 20-24 April 1992).
240. A. Jacot-Descombes, M. Rupp, T. Pun, *LaboImage: A portable window based environment for research in image processing and analysis*, SPIE Vol. 1659, Image Processing and Interchange, 1992, 331-340. (SPIE Symposium on Electronic Imaging Science and Technology, Image Processing: Implementation and Systems, San Jose, California, USA, Feb. 9-14, 1992).
241. T. Pun, M. Lefebvre, S. Gil, D. Brunet, J.-D. Dessimoz, P. Gugerli, *The Potato Operation: computer vision for agricultural robotics*, SPIE Vol. 1615, Machine Vision Architectures, Integration and Applications, 1991, 320-331. (SPIE Conference on Advances in Intelligent Robotic Systems, Boston, USA, Nov. 10-15, 1991).
242. D. Brunet and T. Pun, *Multisource and color lighting for detection of small protuberances*, SPIE Vol. 1614, Optics, Illumination and Image Sensing for Machine Vision, 1991, 23-34. (SPIE Conference on Advances in Intelligent Robotic Systems, Boston, USA, Nov. 10-15, 1991).
243. R. Milanese, J.-M. Bost and T. Pun, *Visual indexing with an attentive system*, Proc. Second AI\*IA Scientific Congress (Associazione Italiana per l'Intelligenza Artificiale), Palermo, Italy, 29-31 Oct. 1991. Published in: Trends in Artificial Intelligence, E. Ardizzone, S. Gaglio, F. Sorbello, Eds., Springer-Verlag, Lecture Notes in Artificial Intelligence, Vol. 549, 1991, 415-419.
244. B.L. Trus, M. Unser, T. Pun and A.C. Steven, *Digital image processing of electron micrographs: the PIC System II*, 10th Pfefferkorn Conference on Signal and Image Processing in Microscopy and Microanalysis, Sept 16-19, 1991, Pembroke College, Cambridge University, England.
245. P.-Y. Burgi and T. Pun, *Figure-ground separation: evidences for asynchronous processing in visual perception?*, 13th Europ. Conf. on Visual Perception, Vilnius, Lithuania, August 25-29, 1991.
246. T. Pun, M. Regamey, P. Narbel and J. Mosig, *Perceptual grouping and directionality determination using an electromagnetic model*, Proc. Vision Interface'91, Calgary, Canada, June 3-7, 1991, 81-88.
247. P.-Y. Burgi and T. Pun, *Figure-ground separation: evidences for asynchronous processing in visual perception?*, Neural Networks for Vision and Image Processing, Boston, USA, May 10-12, 1991. In a more recent version, for: Neural Networks: Methodologies and Applications, San Diego, USA, May 29-31, 1991.
248. R. Milanese, J.-M. Bost and T. Pun, *Visione attenta*, First Workshop on Perception, AI\*IA (Associazione Italiana per l'Intelligenza Artificiale), Parma, Italy, 12-13 April 1991.
249. P.-Y. Burgi, T. Pun and C. Pellegrini, *Temporal analysis and modeling of the visual circuitry*, 12th Europ. Conf. on Visual Perception, Jerusalem-Haifa, Israel, Sept. 17-22, 1989.
250. T. Pun and P.-Y. Burgi, *Perceptual grouping of image primitives using a potential and field approach*, 6th Scandinavian Conference on Image Analysis (6th SCIA), Oulu, Finlande, 19-22 June, 1989, 317-324.
251. T. Pun, D. Hochstrasser and C. Pellegrini, *Correspondance analysis and hierarchical classification of complex images: application to two-dimensionnal gel electrophoretograms*, EUSIPCO 88, 4th European Signal Processing Conf., Grenoble, France, September 5-8, 1988. Also in: Signal Processing IV, theories and applications, J.L. Lacoume, A. Chehikian, N. Martin and J. Malbos, Eds., North-Holland, 1988.

252. R.D. Appel, D.F. Hochstrasser, M. Funk, C. Roch, T. Pun and C. Pellegrini, *Automatic classification of two-dimensional gel electrophoresis pictures by heuristic clustering*, Electrophoresis'88, Copenhagen, July 4-7, 1988.
253. T. Pun, B. Trus, N. Grossman, L. Leive and M. Eden, *Automated computer analysis of 1D electrophoresis gels by image processing*, Proc. 2nd IMACS Symp. on Biomed. Applic. of Computers, Nat. Inst. of Health, Publ. No. 84-2705, J. Eisenfeld and C. DeLisi eds., Bethesda, MD, August 1984.
254. T. Pun and J.R. Ellis, *Statistics of edge areas in quantitative EELS imaging: signal-to-noise ratio and minimum detectable signal*, in: Microbeam Analysis 1983, also: Proc. 18th Annual Conf. Microbeam Anal. Soc., Ron Gooley Ed., San Francisco Press, 156-162.
255. T. Pun and F. de Coulon, *Image processing for visual prosthesis*, Proc. PRIP 1981, IEEE Computer Society, August 3-5, 1981, Dallas, TX, USA, 120-126.

#### 4. Other conferences

1. S. Rayat-Doost, T. Pun, M. Soleymani, "Cross-modality interaction between EEG signals and facial expression for emotion recognition", Annual Research Forum, Swiss Center for Affective Sciences, Feb. 7, 2018, Geneva, Switzerland (poster).
2. M. Muszynski, T. Kostoulas, P. Lombardo, T. Pun, G. Chanel, "Films, aesthetics and emotions - Interdisciplinary studies", Annual Research Forum, Swiss Center for Affective Sciences, Feb. 7, 2018, Geneva, Switzerland (poster).
3. Chen Wang, T. Pun, G. Chanel, "A multimodal database for impression detection and prediction", Annual Research Forum, Swiss Center for Affective Sciences, Feb. 7, 2018, Geneva, Switzerland (poster).
4. M. Btrancourt, T. Pun, G. Molinari, G. Chanel, "EATMINT: Emotion awareness tools for mediated interaction", Swiss Center of Affective Sciences, Closing Conference, May 18-19, 2017, Geneva, Switzerland (invited talk).
5. Chen Wang, T. Pun, G. Chanel, "A comparison of methods for remote heart rate detection from frontal face videos", Swiss Center of Affective Sciences, Closing Conference, May 18-19, 2017, Geneva, Switzerland (poster).
6. M. Muszynski, T. Kostoulas, P. Lombardo, T. Pun, G. Chanel, "Evaluation of synchronization measures for aesthetic highlight detection in movies", Swiss Center of Affective Sciences, Closing Conference, May 18-19, 2017, Geneva, Switzerland (poster).
7. M. Fritz, S. Avry, G. Chanel, T. Pun, G. Molinari, M. Btrancourt, "Real-Time Emotion Self-Report with the Dynamic Emotion Wheel", Annual Research Forum, Swiss Center for Affective Sciences, March 3-4, 2016, Geneva, Switzerland (poster).
8. M. Muszynski, T. Kostoulas, G. Chanel, P. Lombardo, T. Pun, "Spectators' synchronization detection based on physiological signals: application to movie highlights detection", Annual Research Forum, Swiss Center for Affective Sciences, March 3-4, 2016, Geneva, Switzerland (poster).
9. S. Avry, G. Chanel, T. Pun, G. Molinari, M. Btrancourt, "Impact of control and value feedbacks on emotions and collaborative strategies during computer-mediated collaborative problem-solving task", Annual Research Forum, Swiss Center for Affective Sciences, March 3-4, 2016, Geneva, Switzerland (talk).
10. T. Pun, S. Cloix, G. Bologna, V. Weiss, D. Hasler, "EyeWalker: Ultralight low-cost vision system for mobility aids", Hasler Smartworld Workshop, November 2-3, 2015, Fribourg, Switzerland.
11. M. Muszynski, T. Kostoulas, G. Chanel, P. Lombardo, T. Pun, "Spectators' synchronization detection based on manifold representation of physiological signals: application to movie highlights detection", BBL/CIBM Research day, Sept. 28, 2015, Brain-and-Behavior Laboratory, Univ. of Geneva, Switzerland (poster). Also at: Inauguration of the Swiss Doctoral School in Affective Sciences, University of Geneva, Campus Biotech, Geneva, Switzerland.
12. T. Pun, D. Hasler, G. Bologna, S. Cloix, V. Weiss, "The EyeWalker Project", Meeting Community Resourcing Worldwide, Gerontechnology projects in Western Switzerland, June 8, 2015, University of Geneva, Switzerland. (Talk by Guido Bologna).
13. V. Weiss, G. Bologna, S. Cloix, C. Bernier, D. Hasler, T. Pun, "Eyewalker: Vers un dambulateur "intelligent" dtectant des situations risque", Journe de sensibilisation aux grontechnologies 2015 - Innovations technologiques: dfis thiques et juridiques, IMAD - Institution Genevoise de Maintien Domicile, 4 mars 2015, Geneva, Switzerland.

14. S. Avry, G. Molinari, G. Chanel, M. Btrancourt, T. Pun, "The display (or masking) of emotions during computer-mediated interaction: A relationship with reappraisal", ISRE 2015, Int. Soc. Research Emotion, July 7 - 11, 2015, Geneva, Switzerland (abstract, poster).
15. M. A. Fritz, M. Btrancourt, G. Molinari, G. Chanel, T. Pun, "Dynamic Emotion Wheel: an Emotional Awareness Tool for Computer-Supported Collaboration", ISRE 2015, Int. Soc. Research Emotion, July 7 - 11, 2015, Geneva, Switzerland (abstract, poster).
16. T. Kostoulas, G. Chanel, M. Muszynski, P. Lombardo, T. Pun, "Identifying aesthetic highlights in movies from physiological and behavioral synchronization", ISRE 2015, Int. Soc. Research Emotion, July 7 - 11, 2015, Geneva, Switzerland (abstract, poster).
17. S. Avry, G. Molinari, G. Chanel, M. Btrancourt, T. Pun, "EATMINT, Emotional Awareness Tools for Mediated INTERaction", Colloque E-Learning 3.0, 17-18 Octobre 2014, TECFA, Universit de Geneve, Switzerland (poster).
18. G. Bologna, V. Weiss, S. Cloix, C. Bernier, D. Hasler, T. Pun, "Vers un dambulateur "intelligent" dtectant des situations risque", 21e Congr de la Socit Francophone Posture Equilibre et Locomotion (SOFPEL), 5-6 Dec. 2014, Rennes, France (oral preentation and abstract).
19. T. Pun, V. Weiss, S. Cloix, G. Bologna, D. Hasler, "EyeWalker: Ultralight low-cost vision system for mobility aids", Hasler Smartworld Workshop, June 18-19, 2014, Thun, Switzerland.
20. T. Pun, F. Vanel, "Affect sensing", GCC - Geneva Creativity Center Tech Lunch 6, June 12, 2014.
21. T. Pun, "Affective computing for human-human interaction: application to mediated remote cooperation", Invited talk, June 23, 2014, Emotions Laboratory, Univ. of Ulm, Germany.
22. G. Molinari, G. Chanel, D. Cereghetti, M. Btrancourt, T. Pun, "Increasing emotion awareness to improve collaboration in computer-mediated communication", 28th Int. Congress of Applied Psychology, Symposium "New Learning and Teaching Environments for the XXI Century", J. Dinet, M. Btrancourt, J.-M. Boucheix, N. Debue, J. Van der Linden, A. Amiel, C. van de Leemput, S. Fleck, G. Simon, C. Bastien, J. Barcenilla, M. Vanhille, M. Baker, F. Dtienne, A. Tricot, F. Amadiou, July 8-13, 2014, Paris, France.
23. G. Chanel, G. Molinari, D. Cereghetti, M. Btrancourt, T. Pun, "Assessment of collaborative processes and emotions based on multi-person signals", Annual Research Forum, Swiss Center for Affective Sciences, Feb. 13-14, 2014, Geneva, Switzerland.
24. D. Cereghetti, G. Molinari, G. Chanel, T. Pun, M. Btrancourt, "Visual processing of emotions during a computer-mediated collaborative task: An eye tracking study", Annual Research Forum, Swiss Center for Affective Sciences, Feb. 13-14, 2014, Geneva, Switzerland (Poster).
25. T. Kostoulas, G. Chanel, P. Lombardo, T. Pun, "Film, Emotions, and Affective Computing: Detecting aesthetic highlights in movies based on physiological and behavioral signals of spectators", Annual Research Forum, Swiss Center for Affective Sciences, February 13-14, 2014, Geneva, Switzerland (Poster).
26. G. Bologna, S. Cloix, V. Weiss, D. Hasler, T. Pun, "EyeWalker: vers un dambulateur "intelligent" discernant les obstacles et les changements de terrain", 20me Congr SOFPEL, Aux Frontires de la Posture et de la Locomotion, 29-30 novembre 2013, Geneva, Switzerland. *Clinical Neurophysiology*, Vol. 43, No. 6, Nov. 2013, 16.
27. T. Kostoulas, G. Chanel, S. Jarlier, P. Lombardo, T. Pun, "Detecting aesthetic highlight in movies based on physiological and behavioral coupling of spectators: a pilot study", Swiss Nat. Center of Competence NCCR IM2, Final Event, Oct. 17-18, 2013, EPFL - Lausanne, Switzerland.
28. V. Weiss, G. Bologna, S. Cloix, D. Hasler, T. Pun, "A ground change detection algorithm using colour and texture for a smart walker", Swiss Vision Day, May 15, 2013, ETH-Zuerich, Switzerland.
29. S. Cloix, G. Bologna, V. Weiss, T. Pun, D. Hasler, "Object detection and classification using sparse 3D information for a smart walker", Swiss Vision Day, May 15, 2013, ETH-Zuerich, Switzerland.
30. T. Pun, D. Hasler, M. Kocher, G. Bologna, S. Cloix, V. Weiss, "EyeWalker: Ultralight low-cost clipable vision system for mobility aids", Hasler Foundation SmartWorld Workshop, March 13-14, 2013, Spiez, Switzerland.
31. G. Chanel, G. Molinari, C. Bozelle, D. Cereghetti, M. Btrancourt, T. Pun, "Emotion feedback during computer-mediated collaboration", Oral Presentation, Swiss Center for Affective Sciences, Annual Research Forum, Feb. 21-22, 2013, Geneva, Switzerland.
32. G. Chanel, K. Kalogianni, T. Pun, M. Btrancourt, "GamEMO: How Physiological Signals Show your Emotions and Enhance your Game Experience", Poster, Swiss Center for Affective Sciences, Annual Research Forum, Feb. 21-22, 2013, Geneva, Switzerland.

33. G. Chanel, G. Molinari, T. Pun, M. Betrancourt, "EATMI: Emotional awareness tools for mediated interaction", Workshop SONVB, Sensing and Analyzing Nonverbal Behavior in Interactions at Work, Sept. 20-21, 2012, Neuchâtel, Switzerland.
34. T. Pun, *Affective computing and multimodal interaction: Overview of activities*, Invited Talk, Technicolor, Rennes, France, August 27th, 2012.
35. T. Pun, "Affective computing: From case-studies to theory", Swiss Center for Affective Sciences, Graduate Seminars Series, Geneva, Switzerland, June 20, 2012. (Tutorial/short course format)
36. G. Chanel, T. Pun, M. Betrancourt, "Overview of activities, Affective computing focus and computational modeling", Oral Presentation, Swiss Center for Affective Sciences, Annual Research Forum, Feb. 9-10, 2012, Geneva, Switzerland.
37. G. Chanel, G. Molinari, T. Pun, M. Betrancourt, "Emotional Awareness Tools for Mediated Interaction", Oral Presentation, Swiss Center for Affective Sciences, Annual Research Forum, Feb. 9-10, 2012, Geneva, Switzerland.
38. C. Chnes, G. Chanel, M. Soleymani, T. Pun, "Highlight detection in movie scenes through physiological linkage", Poster, Swiss Center for Affective Sciences, Annual Research Forum, Feb. 9-10, 2012, Geneva, Switzerland. This poster, along with 2 others, was awarded the Best poster prize by the International Affective Sciences Center Advisory Board.
39. J. D. Gomez, G. Bologna, T. Pun, "Color-audio encoding interface for visual substitution", Zurich Vision Meeting 2011, April 19, 2011 (poster).
40. M. Soleymani, J. Davis, T. Pun, *A collaborative personalized affective video retrieval system*, ACII 2009, Int. Conf. on Affective Computing and Intelligent Interaction, Demonstration track, extended abstract, poster, Sept. 10-12, 2009, Amsterdam, The Netherlands.
41. T. Pun, J. Kierkels, *Affective computing for multimodal interaction*, CHORUS workshop on Affect, Appeal, and Sentiment as Factors Influencing Interaction with Multimedia Information 2009, May 28, 2009, European Commission, Brussels, Belgium.  
By invitation.
42. J. Kierkels, T. Pun, *Tags and queries in affect-based multimedia retrieval*, Petamedia EU project Audit, Delft, The Netherlands, April 2, 2009. (Extended abstract and poster)
43. M. Soleymani and T. Pun, *Affective representation of movie scenes based on multimedia content analysis and user's physiological emotional responses*, and *Overview of research at the Computer Vision and Multimedia Laboratory, Multimodal Interaction Group*, Dec. 15, 2008, NEC Laboratories America, Cupertino, CA, USA. (Talks given by T. Pun)
44. J.-M. Pignat, O. Koval, S. Voloshynovskiy, T. Pun, *Filtering performance in ICA analysis for fMRI data: an analytical and empirical proof*, Lemanic-Neuroscience Annual Meeting, Sept. 12-13, 2008, Les Diablerets, Switzerland.
45. J. M. Kierkels, T. Pun, *Towards detection of interest during movie scenes*, 2008 PetaMedia Workshop on Implicit, Human-Centered Tagging (HCT), Sept. 5, 2008, Queen Mary University London, London, UK.
46. M. Soleymani, G. Chanel, J. Kierkels, T. Pun, *Valence-arousal representation of movie scenes based on multimedia content analysis and user's physiological emotional responses*, 2008 PetaMedia Workshop on Implicit, Human-Centered Tagging (HCT), Sept. 5, 2008, Queen Mary University London, London, UK.
47. G. Chanel, J. Kierkels, M. Soleymani, D. Grandjean, T. Pun, *Short-term emotion assessment in a recall paradigm*, Joint (IM)2-Interactive Multimodal Information Management and Affective Sciences NCCRs Workshop, Sept. 1-3, 2008, Riederalp, Switzerland.
48. G. Chanel, C. Rebetez, M. Betrancourt, T. Pun, *Boredom, engagement and anxiety as indicators for adaptation to difficulty in games*, Joint (IM)2-Interactive Multimodal Information Management and Affective Sciences NCCRs Workshop, Sept. 1-3, 2008, Riederalp, Switzerland.
49. M. Soleymani, J. Kierkels, G. Chanel, E. Bruno, S. Marchand-Maillet, T. Pun, *Estimating emotions and tracking interest during movie watching, based on multimedia content and physiological responses*, Joint (IM)2-Interactive Multimodal Information Management and Affective Sciences NCCRs Workshop, Sept. 1-3, 2008, Riederalp, Switzerland.
50. J.-M. Pignat, O. Koval, S. Voloshynovskiy, T. Pun, *From non-stationary Gaussian modelling to independent component analysis: an fMRI study*, Lemanic-Neuroscience Annual Meeting, Sept. 14-15, 2007, Les Diablerets, Switzerland.



51. B. Deville, G. Bologna, M. Vinckenbosch, T. Pun, *Guiding the focus of attention of blind people using saliency*, Similar NOE Workshop, June 4-5, 2007, University of Magdeburg, Germany.
52. K. Ansari-Asl, G. Chanel, T. Pun, *A Channel selection method for EEG classification in emotion assessment based on synchronization likelihood*, Similar NOE Workshop, June 4-5, 2007, University of Magdeburg, Germany.
53. G. Chanel, K. Ansari-Asl, T. Pun, *From thoughts to emotions: emotional state assessment using physiological recordings*, HUMABIO EU Project Workshop, "Securing infrastructures and enhancing safety in critical operations; Humabio physiological and behavioural biometrics for unobtrusive authentication and monitoring", February 2, 2007, Basel, Switzerland.
54. R. Rytsar. T. Pun, *The forward EEG solutions: finite elements modelling of the dipole source*, European Bioalpine Convention, October 6, 2006, Grenoble, France.
55. R. Rytsar. T. Pun, *Finite elements modelling of the dipole source in EEG*, Diablerets 2006, Lemanic-Neurosciences Annual Meeting, September 8-9, 2006, Les Diablerets, Switzerland.
56. J. Kronegg, G. Chanel, S. Voloshynovskiy, T. Pun, *Information-transfer rate based performance optimization for brain-computer interfaces*, Similar NOE Workshop, June 8-9, 2006, Heraklion, Greece.
57. G. Chanel, J. Kronegg, D. Grandjean, T. Pun, *Emotion assessment using physiological signals*, Similar NOE Workshop, June 8-9, 2006, Heraklion, Greece.
58. G. Bologna, B. Deville, M. Vinckenbosch, T. Pun, *Touching colour when being visually impaired*, Similar NOE Workshop, June 8-9, 2006, Heraklion, Greece.
59. S. Voloshynovskiy, Y. Rytsar, O. Koval, T. Pun, *Document interactive navigation in multimodal databases*, Similar NOE Workshop, Nov. 24, 2005, Paris, France.
60. G. Chanel, J. Kronegg, T. Pun, *Emotion assessment using physiological signals*, Similar NOE Workshop, Nov. 9-10, 2005, Barcelona, Spain.
61. J. Kronegg, T. Pun, *Measuring the performance of brain-computer interfaces using the information transfer rate*, BCI 2005, Brain-Computer Interface Technology: Third International Meeting, June 14-19, 2005, Rensselaerville, NY, USA.
62. J.-M. Pignat, S. Voloshynovskiy, O. Koval, V. Ibanez, T. Pun, *Non-stationary Gaussian spatio-temporal modeling of fMRI data*, Brain'05 & BrainPET'05, XXIIInd International Symposium on Cerebral Blood Flow, Metabolism, and Function and VIIth International Conference on Quantification of Brain Function with PET, June 7-11, 2005, Vrije Universiteit Amsterdam, The Netherlands.
63. T. Pun, T. I. Alecu, G. Chanel, J. Kronegg, S. Voloshynovskiy, *Research in Brain-computer interaction, Multimodal Interaction Group, Computer Vision and Multimedia Laboratory, University of Geneva*, BCI 2005, Brain-Computer Interface Technology: Third International Meeting, June 14-19, 2005, Rensselaerville, NY, USA.
64. J. Kronegg, T. I. Alecu, *Towards user friendly BCIs*, EU NOE Similar Workshop, Sophia-Antipolis, France, Nov. 8-9, 2004.
65. T. I. Alecu, *Overcoming noise limitations in the EEG Inverse Problem*, EU NOE Similar Workshop, Sophia-Antipolis, France, Nov. 8-9, 2004.
66. S. Voloshynovskiy, O.Koval, J.E. Vila Forcen and T.Pun, *The role of non-perfect side information in multimodal communications*, EU NOE Similar Workshop, Sophia-Antipolis, France, Nov. 8-9, 2004 (presented by O. Koval).
67. J.-M. Pignat, S. Voloshynovskiy, O. Koval, V. Ibanez, T. Pun, *Non-stationary Gaussian spatio-temporal modeling of fMRI data*, First Meeting of the Lemanic Neuroscience Programs, UniGe/UNIL Doctoral School in Neuroscience and the EPFL Doctoral Program, Les Diablerets, Switzerland, 27-28 September, 2004.
68. S. Voloshynovskiy, E. Topak, O. Koval, T. Pun, *Capacity-security analysis of geometrically-robust data-hiding codes*, ECRYPT-Wavila Meeting, Siena, Italy, Oct. 10, 2004.
69. T. I. Alecu, S. Voloshynovskiy, T. Pun, *Regularized two-step brain activity reconstruction from spatio-temporal EEG data*, Joint AMI - PASCAL - (IM)2 - M4 Workshop on Multimodal Interaction and related machine learning algorithms, Martigny, Switzerland, 21-23 June 2004.
70. J.E. Vila Forcen, S. Voloshynovskiy, O. Koval, T. Pun, *Distributed single source coding frameworks for passport photo images*, Joint AMI - PASCAL - (IM)2 - M4 Workshop on Multimodal Interaction and related machine learning algorithms, Martigny, Switzerland, 21-23 June 2004.

71. S. Voloshynovskiy, O. Koval, T. Pun, *Joint compression of independant modalities in smart meeting rooms applications*, Similar Europ. NOE, Similar WP6-WP9 Workshop, May 25-26, 2004, EPF-Lausanne.
72. J. Vila, S. Voloshynovskiy, O. Koval, T. Pun, *Distributed single source coding framework for passport photo images*, NCCR (IM)2 Interactive Multimodal Information Management Workshop, MartignyCrans-Montana, Switzerland, October 6-8, 2003.
73. Y. Rytsar, S. Voloshynovskiy, O. Koval, F. Deguillaume, J. Vila, T. Pun, *Smart Media: from basic concepts to applications*, NCCR (IM)2 Interactive Multimodal Information Management Workshop, MartignyCrans-Montana, Switzerland, October 6-8, 2003.
74. T. Alecu, S. Voloshynovskiy, T. Pun, *Localization properties of an EEG sensor system : electrode misplacement sensitivity*, NCCR (IM)2 Interactive Multimodal Information Management Workshop, MartignyCrans-Montana, Switzerland, October 6-8, 2003.
75. BMI Team, *Brain machine interfaces*, NCCR (IM)2 Interactive Multimodal Information Management Workshop, MartignyCrans-Montana, Switzerland, October 6-8, 2003.
76. J. Vila, O. Koval, S. Voloshynovskiy, T. Pun, *Low bit rate image compression using non-stationary geometrical image priors*, NCCR (IM)2 Interactive Multimodal Information Management Workshop, MartignyCrans-Montana, Switzerland, October 6-8, 2003.
77. S. Voloshynovskiy, Y. Rytsar, O. Koval, T. Pun, *Information-theoretic visual communications in human-computer interfaces: Interactive segmentation*, NCCR (IM)2 Interactive Multimodal Information Management Workshop, MartignyCrans-Montana, Switzerland, October 6-8, 2003.
78. S. Marchand-Maillet, C. Jelmini, T. Pun, *Structured annotation of multimedia data*, NCCR (IM)2 Interactive Multimodal Information Management Workshop, Martigny, Switzerland, October 3-4, 2002.
79. S. Voloshynovskiy, O. Koval, T. Pun, *Wavelet-based image denoising using stochastic geometrical priors*, NCCR (IM)2 Interactive Multimodal Information Management Workshop, Martigny, October 3-4, 2002.
80. H. Mller, W. Mller, S. Marchand-Maillet, T. Pun, D. McG. Squire, *Lernen von Merkmalsgewichtungen beim inhaltsbasierten Suchen in grossen Bilddatenbanken (Learning feature weights from user behaviour in content-based image retrieval)*, Informatiktage 2000, Bad Schussenried, Germany, October 26-27, 2000.
81. T. Pun, A. Herrigel, P. Tschudin, *Krypict: a software environment for copyrighting, authenticating, archiving and retrieving pictorial documents in multimedia databases*, Proc. SPP-ICS Closing Conference, Swiss Priority Program on Information and Communication Structures, Fribourg, March 15, 2000, 82-84.
82. T. Pun, A. Assimacopoulos, L. Petrucci, P. Roth, *ABWeb: Active audio Internet browser for visually impaired and blind users*, Proc. SPP-ICS Closing Conference, Swiss Priority Program on Information and Communication Structures, Fribourg, March 15, 2000, 97-99.
83. H. Mller, D. McG. Squire, W. Mller, T. Pun, *Content-based image retrieval, bildinhaltsbasiertes Suchen in grossen Bilddatenbanken*, Informatiktage 99, Bad Schussenried, Germany, 12. and 13. november 1999.
84. J. Ó Ruanaidh, S. Pereira, A. Herrigel, N. Baumgartner, T. Mittelholzer, T. Pun, *Secure copyright protection techniques for digital images*, SPP-ICS Conference, Swiss Priority Program on Information and Communication Structures, Zuerich, July 13, 1998.
85. T. Pun, A. Herrigel, *Krypict: a software environment for copyrighting, authenticating, archiving and retrieving pictorial documents in multimedia databases*, Proc. Conf. of the Swiss Priority Programme on Information and Communication Structures (SPP ICS), Irchel Campus, Zuerich University, Zuerich, July 13, 1998.
86. T. Pun, A. Assimacopoulos, *ABWeb: Active audio Internet browser for visually impaired and blind users*, Proc. Conf. of the Swiss Priority Programme on Information and Communication Structures (SPP ICS), Irchel Campus, Zuerich University, Zuerich, July 13, 1998.
87. P. Roth, L. Petrucci, A. Assimacopoulos, T. Pun, *Techniques interactives et passives de restitution d'information graphique pour les non-voyants*, Sminaire Technique et Cognition: Finitude, Situation et Inscription Corporelle, Universit de Technologie de Compigne, France, 19-23 janvier 1998, 87-91.
88. T. Pun, C. Rauber, S. Startchik, R. Milanese, *Unified knowledge representation and asynchronous processing for a versatile computer vision system*, Proc. Closing Conf. Swiss Priority Programme Informatics, Swiss Nat. Sc. Foundation Press, Lausanne, Switzerland, March 19-20, 1996, 23-25.

89. T. Pun, *De la reconnaissance des formes à la vision artificielle*, La Relation à l'Environnement: des Réseaux Informatiques aux Réseaux Biologiques, Centre d'Ecologie Humaine et des Sciences de l'Environnement, Genève, 23-24, 30-31 mars et 6-7 avril 1995.
90. T. Pun, C. Rauber, S. Startchik, *Unified knowledge representation and asynchronous processing for a versatile computer vision system*, Proc. Swiss Priority Programme Informatics, Information Conf. Module 2, Swiss Nat. Sc. Foundation Press, Yverdon-les-Bains, CH, Dec. 15-16, 1994, 26-35.
91. M. Lefebvre, T. Zimmerman, C. Baur, P. Gugerli, T. Pun, *Potato Operation: status report*, Proc. 2nd Symposium on Artificial Intelligence and Robotics, R. Bless, Ed., National Research Program NFP/PNR 23, Lausanne, Switzerland, 28-29 September, 1994, 91-96.
92. R. Milanese, T. Pun, *Un modèle computationnel de l'attention visuelle*, Résumé étendu, NSI 94, 7èmes Journées Neurosciences et Sciences de l'Ingénieur, 2-5 mai 1994, Chamonix, France, 19-22.
93. T. Pun, *Vision et cybernétique*, Symp. de Neuro-ophtalmologie et de Réadaptation pour Déficiants Visuels, Genève, Suisse, 14-15 avril 1994.
94. T. Pun, S. Gil, M. Lefebvre, R. Milanese, C. Baur, M.-A. Glassey, E. Natonek, C. Burckhardt, J.-D. Dessimoz, *Computer interpretation of complex tridimensional scenes, with application to the visual guidance of industrial robots*, Proc. Symposium on Artificial Intelligence and Robotics, R. Bless, Ed., National Research Program NFP/PNR 23, Zuerich, Switzerland, 20-22 October 1993, 85-99.
95. J.-M. Bost, S. Startchik, T. Pun, *Delaying as a key feature for visual indexing*, Swiss Vision'93 (5th SGAICO Symp. + 2nd Swiss IAPR Symp.), Zürich, Sept. 14, 1993, 27-36.
96. L. Chachere, C. de Garrini, T. Pun, *Extracting symbolic features defined by natural language for construction of a visual object recognition knowledge base*, Swiss Vision'93 (5th SGAICO Symp. + 2nd Swiss IAPR Symp.), Zürich, Sept. 14, 1993, 131-136 (talk prepared and presented by T. Pun).
97. D. Brunet, T. Pun, *A modular architecture for asynchronous visual processing*, Swiss Vision'93 (5th SGAICO Symp. + 2nd Swiss IAPR Symp.), Zürich, Sept. 14, 1993, 37-44.
98. R. Milanese, J.-M. Bost and T. Pun, *Extraction of interesting regions with bottom-up visual attention*, 1st Swiss Symp. on Pattern Recognition and Computer Vision, Lausanne, Jan. 30-31, 1992, 85-96.
99. S. Gil, M. Lefebvre, M.-A. Glassey, C. Baur, C.W. Burckhardt, R. Clavel, T. Pun, *Opération Patate: Vision par ordinateur en robotique agricole*, Actes 14èmes Journées Francophones sur l'Informatique: Imagerie Numérique, Méthodes et Applications, Genève, 8 et 9 Janvier 1992, 1-5. (Exposé présenté par S. Gil et T. Pun).
100. T. Pun and J.-D. Dessimoz, *Computer interpretation of complex tridimensional scenes, with application to the visual guidance of industrial robots*, National Research Program NFP/PNR 23, Second Program Status Report, Bern, July 1st, 1991.
101. P. Narbel, T. Pun, *Searching for resolution focusing: a journey through scale-spaces*, 1st SGAICO Conference, Computer Vision Workshop, Yverdon-Les-Bains, Switzerland, Oct. 3-4, 1989.
102. P.-Y. Burgi and T. Pun, *Temporal analysis and modeling of the visual circuitry*, SGAICO'90, Swiss Group for Artificial Intelligence and Cognitive Science, Geneva, Oct. 2-3, 1990.
103. M. Lefebvre, J.-D. Dessimoz, P. Gugerli, T. Pun, *Potato Operation*, Computer Vision Workshop, SGAICO'90, Swiss Group for Artificial Intelligence and Cognitive Science, Geneva, Oct. 2-3, 1990.
104. T. Pun and J.-D. Dessimoz, *Computer interpretation of complex tridimensional scenes, with application to the visual guidance of industrial robots*, National Research Program NFP/PNR 23, First Program Status Report, Bern, June 19, 1990.
105. T. Pun, *Low-level vision: some principles, paradigms and issues*, 1st SGAICO Conference, Computer Vision Workshop, Yverdon-Les-Bains, Switzerland, Oct. 3-4, 1989.
106. T. Pun, *Les méthodes classiques de l'analyse d'images en vision artificielle*, Intelligence Artificielle et Robotique, DIP-Valais and Dalle Molle Foundation Ed., June 1989, 147-161.
107. T. Pun, *Vision artificielle: l'apport des méthodes classiques*, invited talk, Journées d'Intelligence artificielle et robotique, Sion, Switzerland, November 22 and 23, DIP-Valais and Dalle Molle Foundation, Eds., 1988.
108. D. Weber, T. Pun, C. Roch, C. Rosu and C. Pellegrini, *Mélanie: Medical Electrophoresis Analysis, Interactive Expert System*, SGAICO - Swiss Group of AI and Cognitive Sciences 1988 Annual Conf. on Artif. Intell. in Manufacturing, Assembly, and Robotics, Bern, Oct.4-5, 1988.

109. Z. Hu, T. Pun and C. Pellegrini, *Expert system for image segmentation*, SGAICO - Swiss Group of AI and Cognitive Sciences 1988 Annual Conf. on Artif. Intell. in Manufacturing, Assembly, and Robotics, Bern, Oct.4-5, 1988.
110. T. Pun, in cooperation with the researchers of the group, *Current activities in the AI and Vision group of the University of Geneva*, SGAICO - Swiss Group of AI and Cognitive Sciences 1988 Annual Conf. on Artif. Intell. in Manufacturing, Assembly, and Robotics, Bern, Oct.4-5, 1988.
111. F. de Coulon, M. Kunt, T. Pun and H. Rey, *Reflets des activités à caractère biomédical du Laboratoire de traitement des signaux de l'EPFL*, Congress of the Swiss Biomedical Engineering Society, Lausanne, 26-27 Septembre 1980.

## 5. Other journals

1. T. Pun, A. Nijholt, *Report on the 2013 Affective Computing and Intelligent Interaction Conference (ACII 2013)*, AI Magazine, Vol. 34, No. 4, Winter Issue, 2013, 121-122. <http://www.aaai.org/ojs/index.php/aimagazine/issue/view/204/showToc>
2. D. Konstantas, R. Milanese, A. Jacot-Descombes, T. Pun, *Distributed video production, distributed musical rehearsal and distributed video editing and retrieval*, Comtec, 2, 2000, 30-37.
3. T. Pun, A. Assimacopoulos, L. Petrucci, P. Roth, *AB-Web: Active audio Internet browser for visually impaired and blind users*, Informatik - Informatique, Swiss Informaticians Society, Nr. 5, October 1999, 45-46.
4. T. Pun, A. Herrigel, P. Tschudin, *KryPict: a software environment for copyrighting, authenticating, archiving and retrieving pictorial documents in multimedia databases*, Informatik - Informatique, Swiss Informaticians Society, Nr. 2, April 1999, 26-27.
5. T. Pun et C. Baur, *Interprétation par ordinateur de scènes tridimensionnelles complexes, avec application au guidage visuel de robots industriels*, Communiqué de Presse, Oct. 1993.
6. T. Pun, *Robotique agricole: Opération Patate, Geneva Vision System*, Cahiers de la Faculté des Sciences, Université de Genève, 1992.
7. T. Pun, *Computer interpretation of complex tridimensional scenes, with application to the visual guidance of industrial robots*, Abstract, SI-Information, Bulletin of the Swiss Association for Computer Science, 1991.
8. T. Pun, *Scientific communications within SGAICO*, SI-Information, Bulletin of the Swiss Association for Computer Science, No. 31, May 1991, 7-8.
9. T. Pun, *How to keep in touch electronically?*, IAPR Newsletter, Vol. 14, No. 1, 1991.
10. A. Jacot-Descombes and T. Pun, *LaboImage 3.0*, Software Survey Section, Computerized Medical Imaging and Graphics, Vol. 14, No. 4, p. III, 1990.
11. T. Pun, *Le Laboratoire Image du Centre universitaire d'informatique (CUI): un environnement de stations de travail pour l'enseignement en traitement d'images et infographie*, Informatique-Informations, Geneva, No. 2, Jan. 1988, 11-12.
12. T. Pun, *Grâce au traitement numérique d'images : voir en touchant*, Polyrama No. 42, Mai 1979, 28-30.

## 6. Miscellaneous, reports

1. T. Pun, K. Meuli, S. Renals, A. Popescu-Belis, "It was worth it! Assessment of the impact of IM2", Interactive Multimodal Information Management, H. Bourlard, A. Popescu-Belis, Eds., EPFL Press, 2013.
2. G. Bologna, S. Cloix, D. Hasler, T. Pun, V. Weiss (alphabetical order), "Cas d'utilisation ("Use Cases")", Projet EyeWalker, Rapport, Aot 2012.
3. T. Pun, T. I. Alecu, G. Chanel, J. Kronegg, S. Voloshynovskiy, *Brain-computer interaction research at the Computer Vision and Multimedia Laboratory, University of Geneva*, Technical report TR0501, Computer Science Department, University of Geneva, June 2005.
4. J. Kronegg, S. Voloshynovskiy, T. Pun, *Brain-Computer interface model: Upper-capacity bound, signal-to-noise ratio estimation, and optimal number of symbols*, Technical report TR0403, Computer Science Department, University of Geneva, <http://vision.unige.ch/> (2004)
5. F. Deguillaume, S. Voloshynovskiy, S. Pereira, T. Pun, *Filigranage d'images digitales*, Dec. 2000.
6. H. Miller, W. Miller, D. McG. Squire, S. Marchand-Maillet and T. Pun, *Long-term learning from user behavior in content-based image retrieval*, Tech. Rep. 00.04, Computer Vision Group, Computing Centre, University of Geneva, March 2000.
7. H. Miller, W. Miller, D. McG. Squire, Z. Pecenovic, S. Marchand-Maillet and T. Pun, *An open framework for distributed multimedia retrieval*, Tech. Rep. 00.03, Computer Vision Group, Computing Centre, University of Geneva, March 2000.

8. W. Mller, H. Mller, S. Marchand-Maillet, T. Pun, D. McG. Squire, Z. Pecenovc, C. Giess and A. P. de Vries, *MRML: A communication protocol for content-based image retrieval*, Tech. Rep. 00.02, Computer Vision Group, Computing Centre, University of Geneva, March 2000.
9. H. Mller, W. Mller, D. McG. Squire, S. Marchand-Maillet and T. Pun, *Strategies for positive and negative relevance feedback in image retrieval*, Tech. Rep. 00.01, Computer Vision Group, Computing Centre, University of Geneva, January 2000.
10. S. Voloshynovskiy, S. Pereira, V. Iquise and T. Pun, *Attack modelling: Towards a second generation watermarking benchmark*, Tech. Rep. 00.05, Computer Vision Group, Computing Centre, University of Geneva, rue Gnral Dufour, 24, CH-1211 Genve, Switzerland, May 2000.
11. H. Mller, W. Mller, D. McG. Squire, T. Pun, *Performance evaluation in content-based image retrieval: Overview and proposals*, Tech. Rep. 99.05, Computer Vision Group, Computing Centre, University of Geneva, rue Gnral Dufour, 24, CH-1211 Genve, Switzerland, December 1999.
12. W. Mller, Z. Pecenovc, A. P. de Vries, D. McG. Squire, H. Mller and T. Pun, *MRML: Towards an extensible standard for multimedia querying and benchmarking - Draft Proposal*, Tech. Rep. 99.04, Computer Vision Group, Computing Centre, University of Geneva, rue Gnral Dufour, 24, CH-1211 Genve, Switzerland, October 1999.
13. G. Csúrka, F. Deguillaume, S. Pereira, J.J.K. O'Ruanaidh, S. Voloshynovskyy, T. Pun, *Invariant watermarking using discrete Fourier transform and template matching*, Technical Report 99.08, Computer Vision Group, Computer Science Department, University of Geneva, August 1999.
14. H. Mller, D. McG. Squire, W. Mller and T. Pun, *Efficient access methods for content-based image retrieval with inverted files*, Tech. Rep. 99.02, Computer Vision Group, Computing Centre, University of Geneva, rue Gnral Dufour, 24, CH-1211 Genve, Switzerland, July 1999.
15. W. Mller, D. McG. Squire, H. Mller and T. Pun, *Hunting moving targets: an extension to Bayesian methods in multimedia databases*, Tech. Rep. 99.03, Computer Vision Group, Computing Centre, University of Geneva, rue Gnral Dufour, 24, CH-1211 Genve, Switzerland, July 1999.
16. F. Deguillaume, G. Csúrka, S. Pereira, J.J.K. O'Ruanaidh, T. Pun, *Invariant watermarking using discrete Fourier transform and template matching*, Technical Report 98.12, Computer Vision Group, Computer Science Department, University of Geneva, December 1998.
17. R. Milanese, A. Jacot-Descombes, T. Pun, F. Deguillaume, L. Petrucci, M. Cherbuliez, A. De Giacomi, *Distributed video editing, archival and retrieval*, Final Report, ACTS Project DVP, Distributed Video Production, Computer Science Department, Report 98.02, University of Geneva, Feb. 1998.
18. D. McG. Squire and T. Pun, *Using human partitionings of an image set to learn a similarity-based distance measure*, Computer Vision Group, Computing Centre, University of Geneva, Report 97.06, November 24th, 1997, 11p.
19. D. McG. Squire, T. Pun, *Assessing agreement between human and machine clusterings of image databases*, Computer Vision Group, Computing Science Center, University of Geneva, Report 97.03, April 1997.
20. A. Perrig, J. Ó Ruanaidh, C. Rauber, A. Herrigel, T. Pun, *The design of a digital watermarking application*, Computer Vision Group, Univ. of Geneva and R3 Security Eng., Report 97.07, Jan. 1997.
21. C. Rauber, R. Milanese, S. Startchik, T. Pun, *Data selection mechanisms for object recognition*, AI and Vision Group, Computing Science Center, University of Geneva, Report 94.06, April 25, 1994.
22. S. Startchik, J.-M. Bost, C. Rauber, R. Milanese, T. Pun, *Automatic construction of invariant geometric representation for object recognition*, AI and Vision Group, Computing Science Center, University of Geneva, Report 94.05, April 25, 1994.
23. R. Milanese, H. Wechsler, S. Gil, J.-M. Bost, T. Pun, *Integration of bottom-up and top-down cues for visual attention using non-linear relaxation*, Int. Computer Science Institute, Berkeley, CA, TR-94-014, March 1994.
24. T. Pun, J.-M. Bost, R. Milanese, C. Rauber, S. Startchik, *Selecting relevant information and delaying irrelevant data for objects recognition*, Computing Science Center, University of Geneva, Report 94.03, March 25, 1994.
25. A. Jacot-Descombes and T. Pun, *Asynchronous perceptual grouping: from contours to generic primitives*, Computing Science Center, University of Geneva, Report 94.01, January 1994.
26. P.-Y. Burgi and T. Pun, *Asynchrony in image analysis: using the relationship luminance-to-latency to improve segmentation*, Computing Science Center, University of Geneva, Report 93.04, June 1993.

27. T. Pun and J.-D. Dessimoz, *Computer interpretation of complex tridimensional scenes, with application to the visual guidance of industrial robots*, National Research Program NFP/PNR 23, Third Program Status Report, Bern, July 6, 1992.
28. S. Startchik, M. Lefebvre, T. Pun, *Calibration d'une caméra par filtrage étendu de Kalman; reconstruction tridimensionnelle*, AI and Vision Group, Computing Science Center, University of Geneva, Report 91.04, April 1991.
29. D. Brunet, T. Pun, *The Potato operation: germ detection by shadows analysis and controlled lighting*, AI and Vision Group, Computing Science Center, University of Geneva, Report 91.03, April 1991.
30. M. Lefebvre, D. Brunet, T. Pun, *The Potato operation: germs detection using contour based measures*, AI and Vision Group, Computing Science Center, University of Geneva, Report 91.02, February 1991.
31. M. Lefebvre, D. Brunet, J.-D. Dessimoz, P. Gugerli, R. Strasser and T. Pun, *The Potato operation: general overview*, AI and Vision Group, Computing Science Center, University of Geneva, Report 91.01, January 1991, 15p.
32. T. Pun, *The Geneva vision system: modules, integration and primal access*, AI and Vision Group, Computing Science Center, University of Geneva, Report 90.06, December 12, 1990, 32p.
33. T. Pun, M. Regamey, P. Narbel and J. Mosig, *Perceptual grouping and directionality determination using an electromagnetic model*, AI and Vision Group, Computing Science Center, University of Geneva, Report 90.02, April 5th, 1990, 19p.
34. P. Narbel and T. Pun, *Journey through scale space*, AI and Vision Group, Computing Science Center, University of Geneva, Report 89.01, October 17th, 1989.
35. T. Pun and D. Schlatter, *Coordinates finding in the time projection chamber (TPC): algorithms and resolution*, Aleph-TPC Note 86-68, European Laboratory for Particle Physics (CERN), May 26, 1986.
36. T. Pun, *Track direction estimation by analysis of one TPC cluster*, Aleph-TPC Note 85-54, European Laboratory for Particle Physics (CERN), October 7, 1985.
37. T. Pun, *Logiciel développé pour le projet de traduction tactile d'images pour handicapés de la vue*, Rapport LTS 82.02, Signal Processing Laboratory, Swiss Federal Institute of Technology (EPFL), 1982.
38. T. Pun, *Extraction de contours et seuils auto-adaptatifs dans le cadre du projet de traduction tactile d'images pour handicapés de la vue*, Rapport LTS 79.07, Signal Processing Laboratory, Swiss Federal Institute of Technology (EPFL), 1979.

## 7. Public events

1. T. Pun, "Informatique affective et multimodale", Uni-3, Universit de Genve, Mardi 2 juin 2015.
2. G. Chanel, T. Pun, V. Weiss, "Tris vous nerve? Recherches en informatique affective et sociale", TecDay@Madame-de-Stael, Collge Madame de Staehl, Genve, Mardi 28 avril 2015.
3. G. Chanel and Colleagues, "EmoTris - Emotive Tetris", part of the 1 year long exhibition "Emotions, Une histoire naturelle", Natural History Museum, Neuchtel, Switzerland, Nov. 30, 2014 to Nov. 29, 2015.
4. High School Visits from all students from the Geneva high schools, Dec. 3, 2009.
5. "Journe des collgiens", Information day for high school students, Oct. 28, 2009. Demonstration: "Apparier ses chaussettes les yeux fermés" (Colored socks pairing based on auditory rendition of colors, work done for a visual prosthesis for sight handicapped people).
6. "Journe des filles", Public demonstrations for young girls, Nov. 12, 2009. Demonstration: "Jouer au flipper sans les mains" (Pinball driven by electro-myograms).
7. "Nuit de l'Universit", Major public exhibition, University of Geneva 450th Anniversary. Demonstrations: "Jouer au flipper sans les mains" (Pinball driven by electro-myograms), "Composer une lettre par la pense" (Brain-computer interaction for writing a letter), "Mesure de l'excitation procure par de la musique" (Measurement of excitation produced by music), "Apparier ses chaussettes les yeux fermés" (Colored socks pairing based on auditory rendition of colors, work done for a visual prosthesis for sight handicapped people), June 13, 2009.
8. T. Pun, "Interaction homme machine multimodale", Rotary Club, Geneva, June 10, 2009.

9. Yearly participation to Open doors, presentations to high-school students, etc.
10. Presentations of our research activities to senior high-school students, Geneva Colleges, 2006. May 16, 2005: “Nouvelles interfaces homme-machine”, College de Staehl, Geneva.
11. “Caf de l’Universit-Informatique”, Roundtable with Junior High-school students, Cycle d’Orientation de la Gradelle, Geneva, with demonstrations and a talk on “Communiquer en touchant, en coutant, et par la pense”, Oct. 4, 2005.
12. “Journe des Collgiens”, Presentation of the Computing Science Department for High-School students, Talk on “Nouvelles interfaces humain-machine: interaction multimodale”, Sept. 28, 2005.
13. “Semaine de l’Informatique Plurielle”, Computing Science Center, University of Geneva, Nov. 22 to 27, 2004, incl. Open Doors day on Saturday Nov. 27, 2004.
14. Open Doors, Copmputing Science Center, University of Geneva, Tuesday Feb. 25, 2003, to Saturday March 1, 2003.
15. CAST-Forum, Competence Center for Applied Security Technology, Exhibition of the Watermarking system Berkut, during the Workshop on Digital Watermarking and Digital Rights Management, 25-26 Sept. 2002, Fraunhofer IGD, Darmstadt, Germany.
16. First Tuesday, 5 Fv., 2002, Genve, “Scurit”: *Filigranage digital de documents multimdia*, T. Pun.
17. Rencontre Virtuelles et Relles, Nicphorecit, 17-18, Nov. 2001: Table ronde “Gestion de de contenu multimdia pour le web” (participation of W. Mueller).
18. Rencontre DEEP (Dpt. Economie, Emploi, Aff. Extrieures), Socits IT, Universit, 18 Mai, 2001, Genve: *Filigranage digital de documents multimdia*, T. Pun.
19. Orbit/Comdex, Sep. 26-29, 2000, Basel, Switzerland: presentation of the SPP-ICS project KryPict (watermarking) as a showcase, Swiss NSF stand.
20. Portes ouvertes (Open doors), May 27, 2000: the Computer Vision and Multimedia Laboratory opens itself to the public, Univ. of Geneva.
21. Computer 2000, May 2-5, 2000, Lausanne, Switzerland: presentation of the Web sonification project as a showcase, Univ. of Geneva stand.
22. Telecom International 1999, Oct. 10-17, 1999, Geneva, Switzerland: presentation of the European project JEDI-FIRE (watermarking) as a showcase, EU stand.

## 8. Media coverage

1. T. Pun, P. Lombardo, Interview by Virginie Matter, RTS1 - Swiss Radio 1, Corpus, Oct. 2, 2013. About the Movie experiment affective computing project.
2. T. Pun, *Images mentales et environnements multimdia anims et interactifs: risques ou opportunit?*, TSR Dcouverte, Scientific portal of the Swiss Tlvision, Oct. 2007, <http://www.tsrdecouverte.ch/home>, <http://www.tsrdecouverte.ch/13-16/forums/all/cerveau-1316/?>
3. P. Cormon, *Des scientifiques genevois veulent transformer les couleurs en sons pour aider les aveugles*, Entreprise Romande, 12 oct. 2007.
4. S. Voloshynovskiy, O. Koval, *Scurit via tlphones portables*, EPFL Flash Informatique, 28 aout 2007, 41-44.
5. Campus, University of Geneva Magazine, “Anteleon: du droit d’auteur la publicit”, Dossier Spin-off, No. 85, avril-mai 2007.
6. RSR1, Radio Suisse Romande, Interviews of Thierry Pun, Serguei Startchik, La Capsule de Pain, *Le marquage numrique*, and *Marquage numrique et dbouchs commerciaux*, by Jean-Olivier Pain, March 28 and 29, 2007.
7. A. Vos, *Esprit, es-tu branch?*, Campus, Magazine de l’Universit de Genve, No. 83, dc. 2006 - jan. 2007, 8-9.
8. RSR 1, Radio Suisse Romande, Interview, Mordicus, *A quoi ressemblera l’homme de demain?*, by Nancy Ypsilantis, Interview by Emmanuel Gripon, May 25, 2006.



9. RSR 1, Radio Suisse Romande, Interview, Mordicus, *Risquons-nous d'être transformé en machine ?*, by Lydia Gabor, Interview by Germaine Müller, Oct. 31, 2005.
10. Swiss National Science Foundation, *Faits marquants du programme d'encouragement du FNS en l'an 2000 (Key moments of the SNSF program for year 2000)*, 49th SNSF Annual Report, March 2001: our watermarking research appears in a list of 13 projects selected in all academic domains for year 2000.
11. Bild der Wissenschaft, June 2001: *Websound: Vertonte Bilder fuer Sehbehinderte*, Ralf Butscher.
12. PRISMA, Swiss NSF, Mai 2001, Coopération avec l'Industrie: *A l'unisson contre les pirates d'Internet*, E. Heinzelmann.
13. Swiss Radio RSR 1, On en parle, *Filigranage d'images*, 05 Apr. 2001: Stéphane Laurenceau.
14. Vision, Le Magazine suisse de la science et de l'innovation, *Des idées génèrent des emplois*, 1/2001, Mars 2001, 22.
15. Futur(e)s, AGEFI, 4, Mars 2001: *Thierry Pun, dompteur d'images*, P. Pauchard.
16. Why Geneva? Feb. 20, 2001, Official Web site of the Canton of Geneva, www.geneva.ch: *Geneva University team wins international accolade for best electronic watermarking*.
17. Tribune de Genève, 19 Fev. 2001: *Des scientifiques genevois inventent le filigrane numérique*, J.-J. Daetwyler.
18. 24 Heures, 14 Fev. 2001: *Invention, l'Uni de Genève contre les pirates d'Internet: un e-tatouage indélébile*, J.-J. Daetwyler.
19. PME Magazine, Fev. 2001: *Un genevois invente le filigrane parfait*, A. Canto.
20. FACTS, Feb. 2001: *Wenn die Bilder tönen lernen*, A. Schürer.
21. SVM, Science et Vie Micro, Jan. 2001: *L'invité, T. Pun, Il invente un watermark en béton*, A. Canto.
22. Polyrama, 114, Dec. 2000: *Inusable et invisible: des signes copyright pour l'Internet*.
23. Le Temps, 4 dec. 2000: *Quand le Web se met au service des malvoyants*, S. Camporini.
24. Swiss Radio RSR 1, Aug. 22, 2000: 1 hour talk show *Websound*, hosted by J.-M. Sandoz.
25. Entreprises, Télécommunications - Informatique, 2628, 16 juin 2000: *Inusable et invisible: Un copyright suisse pour l'Internet*.
26. Swiss Radio RSR Espace 2, June 3, 2000: 1 hour talk show *Entre les lignes: Internet pour les aveugle, entendre les images*, hosted by M. Béguin.
27. 24 Heures, Ven. 2 juin 2000: *Un filigrane contre les pirates*, A. Pichard.
28. Tribune de Genève, Ven. 2 juin 2000: *Des Genevois inventent le copyright numérique*, A.-M. Brouet.
29. Swiss Television News, Telejournal, May 23, 2000: segment on the digital watermarking project.
30. Press Release from the Swiss NSF, feature of the month, May 29, 2000: *Inusables et invisibles: des signes copyright pour l'Internet*. Press item reused by a number of Swiss and international journals and magazines (ATS, Metropol, Blue Window News, La Liberté, Neues Zuercher Zeitung, Le Courrier, Le Quotidien Jurassien, L'Agefi, Schaffhauser Nachrichten, Visual International, Flash EPFL, Edicom Webdo News, Vision, Bull. A3E2PL, CH-Forschung, Techno Forum, etc.).
31. Le Matin, Sam. 6 mai 2000: *Le Net se lit avec les oreilles*, J.-M. Sandoz.
32. Tribune de Genève, Sam.- dim. 29-30 avril 2000: *Des genevois rendent le Web accessible aux aveugles*, A.-M. Brouet.
33. Swiss Television News, Telejournal, Nov. 23, 1999: segment on the Web sonification project.
34. Campus, Univ. of Geneva Magazine, 43, Oct.-Nov. 1999: *Sur Internet, des signatures invisibles protégeront vos images*, D. Christie.
35. Communication, J. Univ. Geneva, Nov. 1999: *Les aveugles sont branchés*.
36. Computerworld, 6, Feb. 1999, *Eigentum schuetzen mit Wasserzeichen*, A. Herrigel.

37. Technik Aktuell, Schweizerische Technische Zeitschrift, 3, 1998, *Elektronische Kommunikation: Digital vor Klau geschuetzt*, E. Heinzelmann.
38. T. Boysan, *L'Universit se branche sur Internet pour mieux orienter les collgiens*, Journal de Genve, 27 janvier 1995.
39. I. Chlebny, *Robotique: Opration patate!*, Journal de Genve, 8 oct. 1994, p. 27.
40. Technische Rundschau, 23 Apr. 1993, *Komplexe Visionsysteme fuer sehende Roboter: Das "Geneva Vision System" der Uni Genf*, E. Heinzelmann.

## 9. Course notes

1. T. Pun, *Introduction à l'informatique pour étudiants en biologie*, Second year students, Course notes (approx. 150 pages), Computer Science Department, Faculty of Sciences, University of Geneva, since 1989, Versions 1 (1989), 2 (1995), 3 (1997).
2. T. Pun, *Introduction à la robotique, Utilisation de senseurs visuels, Reconnaissance d'objets, Utilisation de la couleur, Problemes d'échelle, Apprentissage et reconnaissance par mémoires associatives distribuées*, parts of the course *Cybermétrique appliquée*, Fourth year students, with C. Pellegrini, Course notes, Computer Science Department, Faculty of Sciences, University of Geneva, since 1993.
3. T. Pun, J.-M. Bost, P.-Y. Burgi, P. Narbel, *Vision par ordinateur*, Fourth year students, Course notes, Computer Science Department, Faculty of Sciences, University of Geneva, 1989 to 1992.
4. T. Pun, *Les bases du traitement d'images*, Course notes given during the: Journées de traitement d'images, University of Geneva, October 1st and 2nd, 1987.
5. T. Pun, *Imagerie numérique: synthèse et analyse d'images*, Third and fourth year students, Course notes (approx. 800 pages), Computer Science Department, Faculty of Sciences, University of Geneva, since 1986 (3rd and 4th year).

## 10. Seminars, invited talks

1. T. Pun, "Affective computing and multimodal interaction: From BCI to aesthetics", Invited talk, Workshop: Affective Computing, a Multidisciplinary Challenge, LIRIS, Ecole Centrale de Lyon, France, November 12, 2015.
2. T. Pun, "Affective computing for human-human interaction: application to mediated remote cooperation", Invited talk, Feb. 12, 2014, Emotions Laboratory, Univ. of Ulm, Germany.
3. T. Pun, *Affective computing and multimodal interaction: Overview of activities*, Technicolor, Rennes, France, August 27th, 2012.
4. M. Soleymani and T. Pun, *Affective representation of movie scenes based on multimedia content analysis and user's physiological emotional responses*, and *Overview of research at the Computer Vision and Multimedia Laboratory, Multimodal Interaction Group*, Dec. 15, 2008, NEC Laboratories America, Cupertino, CA, USA. (Talks given by T. Pun)
5. S. Voloshynovskiy, O. Koval, T. Pun, *Product security and anticounterfeiting using mobile devices: art to protect*, U-NICA Group, Liechtenstein, Oct. 2008.
6. T. Pun, *Filigranage digital d'images*, Geneva University Hospital, Radiology Dpt. March 6, 2003.
7. T. Pun, *Stochastic digital image watermarking*, EPFL (Swiss Fed. Inst. Technology, Lausanne), ITS (Signal Processing Institute), March 6, 2002.
8. T. Pun, *Stochastic digital image watermarking*, CERN, Aleph Group, Geneva, August 29, 2001.
9. F. Deguillaume, S. Voloshynovskiy, S. Pereira, G. Csurka, J.O'Ruanaidh, T. Pun, *Digital watermarking for images and video*, SIS Course, Luzern, Switzerland, Jan. 28, 2000.
10. *Applications de l'informatique au multimédia: images jumelles, images sonores, images tatouées*, University of Geneva, Faculty of Sciences, Opening Day of the Academic year 1999-2000, Oct. 25, 1999.

11. *AB-Web: Active audio Internet browser for visually impaired and blind users*, Communication Systems Section, EPF-Lausanne, June 11, 1998.  
Transmitted in parallel to: Zuercher Forschungskolloquium Multimediasysteme, Institut fuer Technische Informatik und Kommunikationsnetze, ETH-Zuerich.
12. *Structuration statistique de bases de données d'images pour systèmes de recherche basée sur le contenu*, Institut d'informatique, Université de Fribourg, Switzerland, January 20, 1997.
13. *Computer vision and multimedia information systems*, seminar given at: CITRI (Collaborative Information Technology Research Institute), Melbourne, Victoria, Australia, Thursday June 15, 1995.
14. *The Potato Operation: a robotic apparatus for the detection of potato diseases*, seminar given at: Department of Computer Science, University of Melbourne, Victoria, Australia, Tuesday May 16th, 1995; Department of Computer Science, Curtin Institute of Technology, Perth, Western Australia, June 2nd, 1995.
15. *Selecting relevant information and delaying irrelevant data for objects recognition*, seminar given at: Electrotechnical Laboratory, Tsukuba Science City, Japan, July 07, 1994; Institute of Industrial Science, University of Tokyo, Japan, July 08, 1994; Department of Computer Science, University of Melbourne, Australia, July 13, 1994.
16. *Reconnaissance d'objets: asynchronisme, opportunisme et délais*, Institut Gallilée, CNRS, Univ. Paris-Nord, 25 avril 1994.
17. *Aspects perceptuels dans le développement d'un système de vision par ordinateur*, Séminaire de Psychobiologie, Faculté de Psychologie et des Sciences de l'Education, 10 mai 1993.
18. *La vision par ordinateur*, Colloque de Physique, Université de Genève, 8 mars 1993.
19. *Visual prosthesis for sight handicapped*, AI and Vision Group, University of Geneva, March 1st, 1993.
20. *Recherches en vision par ordinateur à l'université de Genève*, P.-Y. Burgi, R. Milanese, T. Pun, Université Pierre et Marie Curie, Dpt. des neurosciences de la vision, 23 novembre 1990.
21. *Vision par ordinateur*, Groupe genevois d'intelligence artificielle et sciences cognitives, Genève, mardi 5 juin 1990.
22. *L'image, sa synthèse et son traitement informatique*, in: Cours de dessin assisté par ordinateur, Centre E.A.O., Geneva, February 12-14th, 1990.
23. *Vision par ordinateur*, Computing Center Seminars, University Hospital, Geneva, December 14th, 1989.
24. *Activités en analyse d'images et vision au Centre universitaire d'informatique*, Demi-Journée d'Analyse d'Images de l'Université de Genève, 2 juin 1989.
25. *Morphologie mathématique ou Etude mathématique des formes*, Mathematics and Computing Science Seminars, University of Geneva, April 14th, 1989.
26. *Laboratoire Image: a workstation environment for teaching and research in image processing and analysis and computer graphics*, Second Polytechnic University, Shanghai, People's Republic of China, July 21st, 1988. Also presented at: Northwest University, Xian, Shaanxi, People's Republic of China, August 2nd, 1988.
27. T. Pun, *Présentation des notions de base de l'infographie*, during the course on: Conception assistée par ordinateur et logiciels graphiques, Training Center of the Personnel Office of the State of Geneva, CIDI-U Group, June 16, 1988.
28. *Le Laboratoire Image*, Centre Universitaire d'Informatique, University of Geneva, March 8, 1988.
29. *Augmentation de la résolution d'images de microscope par techniques corrélatives et analyse factorielle*, Centre Universitaire d'Informatique, University of Geneva, April 15, 1986.
30. *Analyse automatique d'images de gels électrophorétiques unidimensionnels*, Centre Universitaire d'Informatique, University of Geneva, January 28, 1986.
31. *Problèmes d'imagerie biomédicale aux National Institutes of Health, et Augmentation de la résolution d'images de microscope par techniques corrélatives et analyse factorielle*, Swiss Federal Institute of Technology, July 3, 1985.
32. *Automated computer analysis of 1D electrophoretic gels by image processing*, National Institutes of Health, Bethesda, MD, USA, September 11, 1984.
33. *Statistical problems in electron energy loss imaging*, Bell Laboratories, Holmdell, NJ, USA, June 2, 1983.

34. *Statistics of edge areas in quantitative EELS imaging*, National Institutes of Health, Bethesda, MD, USA, May 18, 1983.
35. *Traitement d'images pour prothèse visuelle*, Fac. Psych. et des Sciences de l'Education, University of Geneva, March 1st, 1982.
36. *Image processing for visual prosthesis*, Concordia University, September 3, 1981.