CURRICULUM VITAE

PERSONAL DETAILS

Name:	Miguel Tavares Coimbra
Date of Birth:	15/05/1975
Nationality:	Portuguese
Address:	Rua Clube dos Caçadores, 905, 1° DTTZ
	4430-057 Vila Nova de Gaia
	Portugal
E-mail:	mcoimbra@fc.up.pt
Webpage:	www.dcc.fc.up.pt/~mcoimbra

EDUCATION

2004-2006   Post-Doc studies at IEETA, University of Aveiro, Portugal. Work consisted in using computer vision methods for the creation of computer tools for clinical analysis of a variety of video exams. Examples include automatic annotation of endoscopic capsule exams, single particle tracking for low SNR confocal microscopy exams, and numerical quantification of patient 3D motion during epileptic seizures.

1999-2004   PhD in Electronic Engineering, Queen Mary, University of London, "Compressed Domain Processing with Applications to Surveillance". Research consisted in the study of compressed domain information of encoded digital video. This resulted in the development of fast tools that approximate traditional image and video processing methods. The test scenario for these tools was a real underground train CCTV surveillance system.

1993-1998   BEng in Electrical and Computer Engineering with specialization in Telecommunications, at Faculdade de Engenharia da Universidade do Porto, Portugal. Final average: 16. Distinction for graduating in the top 5% of students.

PROFESSIONAL AND ACADEMIC EXPERIENCE

2006-…   Assistant Professor of the Computer Science Dep., Faculty of Sciences of the University of Porto, Portugal.

1998-1999   Researcher at INESC-Porto. Worked in the VIDION project in collaboration with RTP, the Portuguese public television provider. Work consisted in the development of the 'Search workstation' for RTP's multimedia digital archive. It included search, real-time navigation and on-line visualization of results.

TEACHING EXPERIENCE

2006-…   Graduate and Undergraduate Courses at Universidade do Porto
- 2011/12
  - Human-Computer Interaction
  - Interactive Systems for Health (MSc)
  - Computer Vision (MSc)
  - Signal and Image Processing (MSc)
  - Computer Vision (PhD)
  - Data Structures
- 2010/11
  - Human-Computer Interaction
  - Computer Vision (MSc)
  - Signal and Image Processing (MSc)
  - Computer Vision (PhD)

- o Data Structures
  - 2009/10
    - o Human-Computer Interaction
    - o Computer Vision (MSc)
  - 2008/09
    - o Human-Computer Interaction
    - o Computer Vision (MSc)
    - o Seminar (MSc)
    - o Telemedicine and e-Health (MSc)
    - o Signal and Image Processing (MSc)
    - o Computer Vision (PhD.)
  - 2007/08
    - o Human-Computer Interaction
    - o Computer Vision (MSc)
    - o Computer Vision (PhD)
    - o Signal and Image Processing (MSc)
  - 2006/07
    - o Introduction to Informatics
    - o Data Structures and Algorithms
    - o Graphical Interfaces
    - o Signal and Image Processing (MSc)
    - o Monograph

2002-2003	Lab Monitor for 'Image Processing' at Queen Mary, University of London, under the supervision of Dr. Ebroul Izquierdo.
2002-2003	Lab Monitor for 'Multimedia' at Queen Mary, University of London, under the supervision of Dr. Ebroul Izquierdo.
1999-2000	Lab Monitor for 'C++ Programming' at King's College London, under the supervision of Dr. Sergio Velastin.

STUDENT SUPERVISION

Post-Doc	Ricardo Sousa *"Computer Vision for Gastroenterology"*, UP Ana Castro *"DigiScope – Digitally Enhanced Stethoscope for Clinical Usage"*, UP
PhD	Fahran Riaz *"Computer Assisted Analysis of Narrow-Band Imaging Endoscopy Exams"*, PDCC, FCUP Paulo Alves *"Event Detection for Capsule Endoscopy Video Exams"*, ProDEI, FEUP Can Ye *"Applied Computer Vision for Critical Infrastructures"*, CMU-Portugal, FCUP Fábio Hedayioglu, *"DigiScope - DIGItally enhanced stethoSCOPE for clinical usage"*, MIM, UP Pedro Gomes, *"Body signal analysis for monitoring fatigue in first responders"*, MAP-i, UP *Daniel Pereira,* *"Designing cardiac pathology screening systems for hospitals using digital stethoscopes"*, PDCC, FCUP
MSc	Nuno Silva *"Audio processing for digital stethoscopes used in real clinical environments"*, MCC, FCUP Antonio Sousa *"Sistemas Interactivos para Gastrenterologia"*, MIM, UP Carlos Vicente

	"Adaptação de um registo clinico hospitalar para dispositivos móveis com conetividade limitada", (co-supervisor), MIM, UP
	Fernando Almeida
	"An Auscultation System using Digital Stethoscopes and Smarphones", (co-supervisor), MIM, UP
	Vasco Louro
	"Using automatic deformable registration of daily cone-beam CT images to better predict adverse effects in prostate cancer radiotherapy patients", MIM, UP
	Aida Silva,
	"Avaliação Quantitativa da Deglutição", (co-supervisor), *MIM, UP*
	Marcos Marafona
	"Photographic Records of Wounds", (co-supervisor), *MIM, FCUP/FMUP*
Researchers	Bruno Lopes,
	MSc Researcher, CellNote project
	Sérgio Faria
	BSc Researcher, Vital Responder project
	João Ramos
	MSc Researcher, DECA-Bio project

ALUMNI

MSc	Liliana Rodrigues,
	"Optimização do volume de meio de contraste iodado endovenoso em TC multidetector de 40 canais", (co-supervisor), *MIM, UP*
	Daniel Pereira,
	"Unobtrusive Collection and Annotating of Auscultations in Real Hospital Environments", (co-supervisor), *MIM, UP*
	Celso Ferreira
	"CellNote: Image processing modules for cellular images", MCC, FCUP
	Artur Oliveira,
	"Metodologia e algoritmos de suporte ao diagnóstico e prognóstico do cancro da pele", (co-supervisor), *MIERSI, FCUP*
	Pedro Nogueira,
	"Determining Leishmania Infection Levels by Automatic Analysis of Microscopy Images", MIERSI, FCUP
	Johannes Pallauf
	"Associating ECG features with firefighter's activities", TUM, Germany (Co-Supervision with Prof. Klaus Diepold, TUM, Germany), 2011
	Bruno Lopes
	"Software Platform for Assisted Analysis of Cellular Images", MCC, FCUP, 2010
	Fábio Hedayioglu,
	"DigiScope - DIGItally enhanced stethoSCOPE for clinical usage", MIM, UP, 2010
	João Patriarca
	"Criptografia Adaptiva para Codificação Avançada", MCC, FCUP (Co-Supervision. Supervisor: João Barros, FEUP), 2009
	André Sousa,
	"Analysis of colour and texture features of vital-stained magnification-endoscopy images for computer-assisted diagnosis of precancerous and cancer lesions", MIEIC, FEUP, 2008
Scientific Projects	Nelson Gomes,
	"Plataformas de processamento de imagem digital: ao encontro de um propósito mais abrangente", DCC, FCUP, 2007
	Bruno Lopes,
	"Determining Leishmania Infection Levels by Automatic Analysis of Fluorescence Microscopy Images", IBMC, 2008

Carla Teixeira
"Visita Guiada ao Interior de um Computador", 2008
Luciana Santos
"Introdução à imagem digital", 2008
Marta Falcão,
"Levantamento de tecnologias Web actuais passíveis de apoiar o estudo de um aluno do ensino secundário", 2008
Nádea Serra,
"Ferramenta de ensino para alunos com necessidades educativas especiais", 2008
Patrícia Silva, Isabel Neves, Teresa Soares,
"Tenho Dislexia", 2009

PUBLICATIONS - JOURNAL PAPERS

1. C. Ye, B.V.K. Vijaya Kumar, M. Coimbra, "Heartbeat Classification using Morphological and Dynamic Features of ECG Signals", accepted for publication on IEEE Transactions on Biomedical Engineering.
2. M. Coimbra, M. Mackiewicz, M. Fisher, C. Jamieson, J. Soares, J.P. Silva Cunha, "Computer Vision Tools for Capsule Endoscopy Exam Analysis", invited paper in Eurasip NewsLetter, vol. 18/1, March 2007, pp. 1-19.
3. J.P. Silva Cunha, M. Coimbra, P. Campos, J. Soares, "Automated Topographic Segmentation and Transit Time Estimation in Endoscopic Capsule Exams", accepted for publication in IEEE Transactions in Medical Imaging.
4. M. Coimbra, and J.P. Silva Cunha, "MPEG-7 visual descriptors – Contributions for automated feature extraction in capsule endoscopy", in IEEE Trans. Circuits and Systems for Video Technology, vol. 16/5, 2006, pp. 628-637.
5. M. Coimbra, and M. Davies, "Approximating optical flow within the MPEG-2 compressed domain" in IEEE Transactions on Circuits and Systems for Video Technology, Volume: 15 , Issue: 1 , Jan. 2005, pp. 103-107.

PUBLICATIONS - CONFERENCE PAPERS

1. P. Gomes, B. Lopes, M. Coimbra, "Field Validation of a Framework for Annotating Biological Signals of First Responders in Action", in Proc. IEEE EMBC, San Diego, USA, Set 2012.
2. P. Gomes, M. Kaiseler, C. Queirós, M. Oliveira, B. Lopes, M. Coimbra, "Vital Analysis: Annotating sensed physiological signals with the stress levels of first responders in action", in Proc. IEEE EMBC, San Diego, USA, Set 2012.
3. F. Hedayioglu, M. Jafari, S. Mattos, M. Plumbley, M. Coimbra, "Denoising of the Second Heart Sound Using Matching Pursuit", in Proc. IEEE EMBC, San Diego, USA, Sep 2012.
4. P. Ferreira, F. Mourato, D. Pereira, M. Coimbra, R. Cruz-Correia, S. Mattos and I. Dutra, "Detecting Cardiac Pathologies from Annotated Auscultations", in Proc. of 25th IEEE International Symposium on Computer-Based Medical Systems (CBMS 2012), Rome, Italy, Jun 2012.
5. M. Coimbra, J.P.S. Cunha, "Vital Responder – Wearable Sensing Challenges in Uncontrolled Critical Environments", (invited paper) in Proc. 3rd International Conference on Sensor Systems and Software (S-Cube), Lisbon, Jun 2012.
6. Z. Reis, C. Freire, A Pereira, C. Couto, R. Correia, M. Coimbra, "Ensino da ausculta cardíaca em ambiente e-learning para capacitação de estudantes e profissionais de saúde no diagnóstico de cardiopatias em gestantes" (abstract), in 49º Congresso Brasileiro de Educação Médica, Belo Horizonte, Brazil, Nov 2011.
7. F. Baldaque Silva, N. Marques, M. Coimbra, et al., "Accuracy and Learning Curve of the Amsterdam Endoscopic Classification of Barrett's Esophagus" (abstract), in 19th United European Gastroenterology Week (UEGW 2011), Stockholm, Sweden, Oct 2011.
8. C. Ye, B.V.K. Vijaya Kumar, M. Coimbra, "Human Identification based on ECG Signals from Wearable Health Monitoring Devices", in Proc. 4th International Symposium on Applied Sciences in Biomedical and Communication Technologies (ISABEL 2011), Barcelona, Spain, Oct 2011.

9. M. Jafari, F. Hedayioglu, M. Coimbra and M. Plumbley, "Blind source separation of periodic sources from sequentially recorded instantaneous mixtures", in Proc. International Symposium on Image and Signal Processing and Analysis, Dubrovnik, Croatia, Sep 2011.

10. J. Pallauf, P. Gomes, S. Brás, J.P.S. Cunha, M. Coimbra, "Associating ECG features with firefighter's activities", in Proc. IEEE EMBC, Boston, USA, Sep 2011.

11. C. Ye, J. Pallauf, B.V.K. Vijaya Kumar, M. Coimbra, "Customizing Training Dataset for Improved Heartbeat Recognition Performance in Long-Term ECG Signal Analysis", in Proc. IEEE EMBC, Boston, USA, Sep 2011.

12. N. Marques, E. Dias, J.P.S. Cunha, M. Coimbra, "Compressed Domain Topographic Classification for Capsule Endoscopy", in Proc. IEEE EMBC, Boston, USA, Sep 2011.

13. D. Pereira, F. Hedayioglu, R. Correia, T. Silva, I. Dutra, F. Almeida, S. S. Mattos, M. Coimbra, "DigiScope – Unobtrusive Collection and Annotating of Auscultations in Real Hospital Environments", in Proc. IEEE EMBC, Boston, USA, Sep 2011.

14. F. Riaz, F. Vilarino, M. Dinis-Ribeiro, M. Coimbra, "Identifying potentially cancerous tissues in Chromoendoscopy images", in Proc. Iberian Conference on Pattern Recognition and Image Analysis, Gran Canaria, Spain, Jun 2011.

15. F. Hedayioglu, M. Jafari, S. Mattos, M. Plumbley, M. Coimbra, "Separating sources from sequentially acquired mixtures of heart signals", in Proc. IEEE ICASSP, Prague, Czech Republic, May 2011.

16. F. Riaz, M. Areia, F. Baldaque Silva, P. Nunes, M. Dinis-Ribeiro, M. Coimbra, "Gabor Textons for Classification of Gastroenterology Images", in Proc. IEEE International Symposium on Biomedical Imaging, Chicago, USA, Apr 2011.

17. C. Ye, M. Coimbra, B.V.K. Vijaya Kumar, "Investigation of Human Identification using Two-Lead Electrocardiogram (ECG) Signals", in Proc. IEEE Biometrics: Theory, Applications and Systems, Washington DC, USA, Sep 2010.

18. C. Ye, M. Coimbra, B.V.K. Vijaya Kumar, "Arrhythmia Detection and Classification using Morphological and Dynamic Features of ECG Signals", in Proc. IEEE EMBC, Buenos Aires, Argentina, Sep 2010.

19. M. Coimbra, F. Riaz, M. Areia, F. Baldaque Silva, M. Dinis-Ribeiro, "Segmentation for Classification of Gastroenterology Images", in Proc. IEEE EMBC, Buenos Aires, Argentina, Sep 2010.

20. M. Marques, F. Baldaque Silva, P. Bastos, R. Ramalho, P. Pereira, A. Ribeiro, N. Marques, M. Coimbra, M. Vieth, L. Lundell, M. Dinis-Ribeiro, HU. Marschall, G. Macedo, "Validade diagnóstica e curva de aprendizagem da classificação de Kara na avaliação do esófago de Barrett usando endoscopia de magnificação e narrow band imaging", (abstract) in 30th National Meeting in GastroEnterology, Vilamoura, Portugal, Jun 2010.

21. J. P. S. Cunha, S. Lima, D. Pacheco, I. Oliveira, J. M. Fernandes, L. Alves, M. Coimbra, and J. Soares, "Automated Endoscopic Capsule Massive Analysis using a Grid Computing Environment," (abstract) in VIII Reunião Ibérica de Cápsula Endoscópica, Porto, Portugal, 2010.

22. J. P. S. Cunha, S. Lima, M. Coimbra, and J. Soares, "ECCA - A Tool for fast annotation of endoscopic capsule exams and its use in a new polyp detection algorithm," (abstract) in VIII Reunião Ibérica de Cápsula Endoscópica, Porto, Portugal, 2010.

23. M. Dinis-Ribeiro, F. Riaz, A. Sousa, P. Pimentel-Nunes, M. Areia, M. Coimbra, "Computer-assisted analysis of gastric magnification chromoendoscopy images: feasibility and potential aplications", (abstract) in World Congress of Gastroenterology, London, UK, Nov 2009.

24. A. Sousa, M. Dinis-Ribeiro, M. Areia, M. Coimbra, "Identifying cancer regions in vital-stained magnification endoscopy images using adapted color histograms", in Proc. of IEEE ICIP 2009, Cairo, Egypt, Nov 2009.

25. F. Riaz, M. Dinis-Ribeiro, M. Coimbra, "Quantitative Comparison of Segmentation Methods for In-Body Images", in Proc. of IEEE EMBC 2009, Minneapolis, USA, Sep 2009.

26. S. Lima, J.P. Silva Cunha, M. Coimbra, J. Soares, "ECCA – Endoscopic Capsule Capview cAtaloguer", in Proc. of 11th World Congress on Medical Physics and Biomedical Engineering, Munich, Germany, Sep 2009.

27. F. Riaz, A. Sousa, P. Pimentel-Nunes, M. Areia, M. Coimbra, M. Dinis-Ribeiro, "Análise assistida por computador de imagens de cromendoscopia gástrica: praticabilidade e aplicabilidade", (abstract) in 29th National Meeting in GastroEnterology, Porto, Portugal, 2009.

28. F. Riaz, M. Dinis-Ribeiro, M. Coimbra,"A Review of Current Computer Aided Diagnosis Systems for Polyp Detection in Virtual Colonoscopy",7th Conference on Telecommunications, Santa Maria da Feira, Portugal, May 2009.

29. F. Riaz, M. Dinis-Ribeiro, M. Coimbra, "Semantic relevance of current image segmentation algorithms", in Proc. of IEEE WIAMIS 2009, London, UK, May 2009.

30. S. Lima, M. Coimbra, J. Soares, J.P. Silva Cunha, "A Tool for Endoscopic Capsule Dataset Preparation for Clinical Video Event Detector Algorithms", in Proc. of Healthinf 2009, Porto, Portugal.

31. F. Hedayioglu, S. Mattos, and M. Coimbra, "A Survey of Audio Processing Algorithms for Digital Stethoscopes", in Proc. of HealthInf 2009, Porto, Portugal.

32. A. Sousa, M.Dinis-Ribeiro, M.Areia, M.Correia, M. Coimbra, "Towards more adequate colour histograms for in-body images", in Proc. of IEEE EMBC 2008, Vancouver, Canada, 2008.

33. M. Coimbra, J. Kustra, P. Campos, J.P. Silva Cunha, "Combining Color with Spatial and Temporal Position of the Endoscopic Capsule for Improved Topographic Classification and Segmentation", in Proc. of SAMT 2006, Athens, Greece, 2006.

34. J.P. Silva Cunha, M. Coimbra, J. Kustra, P. Campos, J. Soares, "Posição e Velocidade Espacial da Cápsula Endoscópica como Ferramenta de Apoio ao Diagnóstico Clínico", (abstract) in 26th National Meeting in GastroEnterology, Porto, Portugal, 2006.

35. J. Soares, F. Baldaque, L. Lopes, M. Coimbra, J.P. Silva Cunha, "Precisão e Eficiência da Anotação Topográfica Manual de Exames de Cápsula Endoscópica", (abstract) in 26th National Meeting in GastroEnterology, Porto, Portugal, 2006.

36. J.P. Silva Cunha, M. Coimbra, C. Vollmar, S. Noachtar, "Quantification of 3d Motion Data for Seizure Semiology Analysis in Epilepsy", (abstract) in 18th National Meeting in Epileptology, Porto, Portugal, 2006.

37. J.P. Silva Cunha, M. Coimbra, P. Campos, J. Soares, "Faster Wireless Capsule Exam Analysis using Automatic Tools", (abstract), in Proc. of International Conference on Capsule Endoscopy 2006, Miami, USA, 2006.

38. M. Coimbra, J.P. Silva Cunha, P. Campos, J. Soares, "Capview.org: A Research Framework for the Development of Automatic Tools for Capsule Endoscopy", (abstract), invited paper in Proc. of. 4th Iberian Meeting of Capsule Endoscopy, Coimbra, Portugal, 2006.

39. J.P. Silva Cunha, M. Coimbra, P. Campos, J. Soares, "The First Capview.Org Automatic Tool for Capsule Endoscopy", (abstract), invited paper in Proc. of. 4th Iberian Meeting of Capsule Endoscopy, Coimbra, Portugal, 2006.

40. M. Coimbra, P. Campos, and J.P. Silva Cunha, "Topographic Segmentation and Transit Time Estimation for Endoscopic Capsule Exams", in Proc. of IEEE ICASSP 2006, Toulouse, France, 2006.

41. M. Coimbra, P. Campos, and J.P. Silva Cunha, "Extracting clinical information from endoscopic capsule exams using MPEG-7 visual descriptors", in Proc. of IEE EWIMT 2005, London, UK, 2005.

42. M. Coimbra, J.P. Silva Cunha, R. Bausinger, C. Bräuchle, A. Zumbusch, "Objective analysis of illumination noise in fluorescence microscopy", in Proc. of WIAMIS 2005, April, Montreux, Switzerland, 2005.

43. M. Coimbra, and M. Davies, "A Numerical Comparison of Compressed Domain Approximations to Optical Flow", WIAMIS 2004, Lisbon.

44. M. Coimbra, and M. Davies, "Segmentation of moving pedestrians within the compressed domain", in Proc. of IEEE ICASSP 04, Montreal, Canada, 2004.

45. M. Coimbra, and M. Davies, "A New Pedestrian Detection system using MPEG-2 Compressed Domain Information", in Proc. of IASTED International Conference on Visualization, Imaging, and Image Processing (VIIP 2003), Spain, 2003, pp. 598-602.

46. M. Coimbra, M. Davies and S. Velastin, "Pedestrian Detection using MPEG-2 Motion Vectors", in Proc. of WIAMIS 2003, London, 2003, pp. 164-169.

OTHER PUBLICATIONS

1. M. Coimbra, "Poderá um computador 'ver' imagens de cápsula endoscópica?", in EndoNews, Vol: 15, Jul. 2006, pp. 9.

FINANCED PROJECTS

1. MovEpil3D - Motion quantification of 3D body motion during epileptic seizures; Funding Organization: FCT; Role: Investigator; Funding: 128.796€; Duration: 3 years.
2. GERES-Med - Grid-Enabled REpositorieS for medical applications; Funding Organization: FCT; Role: Investigator; Funding: 199.560€; Duration: 3 years.
3. CapView – Automated Tools for Endoscopic Capsule Exam Analysis; Funding Organization: FCT; Role: Investigator; Funding: 87.300€; Duration: 3 years.
4. Vital Responder - Monitoring Stress in First Responder Professionals; Funding Organization: FCT; Role: Co-PI (IT Team Leader); Funding: 519.456€; Duration: 3 years.
5. DigiScope - DIGItally enhanced stethosCOPE for clinical usage; Funding Organization: FCT; Role: PI; Funding: 120.000€; Duration: 3 years
6. CAGE - Computer Assisted Gastroenterology Examination; Funding Organization: FCT; Role: PI; Funding: 145.000€; Duration: 3 years
7. CellNote Touch - Touch-based Interactive Annotation of Cellular Images; Funding Organization: IT; Role: PI; Funding: 46.400€; Duration: 2 years
8. DECA-Bio - Dependent Component Analysis of Biological Signals; Funding Organization: IT; Role: Co-PI (IT Porto Team Leader); Funding: 35.700€; Duration: 2 years

SELECTED PRESENTATIONS

1. 04/06/2012 – "Vital Responder – Wearable Sensing Challenges in Uncontrolled Critical Environments", invited speaker at 3rd International Conference on Sensor Systems and Software (S-Cube), Lisbon
2. 28/10/2011 - "Healthy Hearts in Future Cities", Polaris Future Cities Workshop, Porto
3. 22/09/2011 - "Listen to your heart", SPML-LAI, FEUP, Porto
4. 20/12/2010 - "Listen to your heart", Machine Listening Workshop, Queen Mary University of London, United Kingdom
5. 25/11/2010 - "CAGE - Computer Assisted Gastroenterology Examination", Back2Basics Seminar, Faculdade de Engenharia, Universidade do Porto, Portugal
6. 09/07/2010 - "T-LIFE - Therapeutic Learning of Facial Emotions", University of Sussex, UK
7. 22/06/2010 - "CAGE - Computer Assisted Gastroenterology Examination", Portugal|UTAustin, Workshop on Imaging Sciences and Medical Applications, University of Coimbra, Portugal
8. 11/05/2010 - "Vital Responder - Monitoring Stress among First Responder Professionals", University of Cambridge, UK
9. 04/03/2010 - "Vital Responder - Monitoring Stress among First Responder Professionals", Queen Mary University of London, UK
10. 04/12/2009 - "Detecting Cancer in Chromoendoscopy", Universidade da Beira Interior, Covilhã
11. 14/04/2009 - "Computer Assisted Analysis of Emerging Gastroenterology Imaging Technologies", MSc Seminar (MSc in Medical Physics), FCUP, Porto
12. 18/03/2009 - "Image Processing and Analysis", 1st Basic Course on Optical Microscopy Imaging for Biosciences, IBMC, Porto
13. 06/03/2009 - "Looking In: Emerging Imaging Technologies for Gastroenterology", MSc Seminar (MIM), FMUP, Porto
14. 30/01/2009 - "A Little Vision for Biologists", MIT, Boston, USA.
15. 29/01/2009 - "Vital Responder - Monitoring Stress in First Responder Professionals", Carnegie-Mellon University, Pittsburgh, USA.
16. 01/08/2008 - "Medical Imaging Research @ NIP.", UNICENTRO - Universidade Estadual do Centro-Oeste, Guarapuava, Brazil
17. 01/07/2008 - "Medical Imaging Research @ NIP", Real Hospital Português de Beneficiência de Pernambuco, Recife, Brazil

18. 21/07/2008 - "Applied Computer Vision Applications", Fraunhofer Institute, Porto
19. 31/01/2008 - "Applied Computer Vision Applications", IBMC, Porto
20. 08/01/2008 - "Analysis tools for endoscopic capsule exams", MSc Seminar (MAOPI), FCUP, Porto

PATENTS

1. M. Coimbra and M. Davies, PCT International Application No. PCT/EP2004/051325, "Optical Flow Estimation Method", Queen Mary & Westfield College, 1st July 2004.

TECHNICAL PROGRAM COMMITTEES

1. HealthInf 2013, International Conference on Health Informatics, Barcelona, Spain, Feb 2013
2. LACNEM 2012, IV Latin American Conference on Networked and Electronic Media, Santiago, Chile, Oct 2012
3. CISP 2012, 5th International Congress on Image and Signal Processing, Chongqing, China, Oct 2012
4. CMBS 2012, 25th International Symposium on Computer-Based Medical Systems, Rome, Italy, June 2012
5. CIA 2012, International Workshop on Computer Image and its Applications, Vancouver, Canada, Jun 2012
6. HealthInf 2012, International Conference on Health Informatics, Vilamoura, Portugal, Feb 2012
7. LACNEM 2011, III Latin American Conference on Networked and Electronic Media, Costa Rica, Nov 2011
8. RecPad 2011, Conferência Portuguesa de Reconhecimento de Padrões, Porto, Portugal, Oct 2011
9. CMNE 2011, Congresso de Métodos Numéricos em Engenharia, Coimbra, Portugal, Jun 2011
10. LEMEDS 2011, Learning from Medical Data Streams, Bled, Slovenia
11. ICIAR 2011, International Conference on Image Analysis and Recognition, Canada
12. ISVC 2010, 6th International Symposium on Visual Computing, Las Vegas, Nevada, USA
13. CISP 2010, 3rd International Congress on Image and Signal Processing, Yantai, China
14. ICIAR 2009, International Conference on Image Analysis and Recognition, Halifax, Canada
15. ICIAR 2008, International Conference on Image Analysis and Recognition, Póvoa de Varzim, Portugal
16. SecTech 2008, International Conference on Security Technologies, Samui, Thailand

ACADEMIC COMMITTEES

PhD	1.	Thilini P. Rajakaruna, U. Surrey, Nov 2011
	2.	Luisa Lima, PDCC, FCUP, Dec 2010
	3.	Janete Borges, DMA, FCUP, Oct 2009
	4.	Sílvia de Francesco, UA, 2009
	5.	Pedro João Soares Rodrigues, UM, Dec 2008
PhD Steering	1.	Ricardo Couceiro, DPIST, UC, Oct 2010
Committee	2.	Ana Rebelo, PDEEC, FEUP, Set 2010
MSc	1.	Eduardo Burnay, MIM, FMUP, Feb 2012
	2.	João André Barros, MCC, FCUP, Jul 2011
	3.	Ana Alves, MIB, FEUP, Jul 2011
	4.	Marcio Colunas, UA, Dec 2010
	5.	Paulo Saraiva, DETI, UA, Dec 2009
	6.	João Oliveira, DI, UBI, Set 2009
	7.	João Correia, DMA, FCUP, 2009
	8.	Sérgio Lima, DETI, UA, Jan 2009
	9.	Denis Roda Dos Santos, DETI, UA, July 2008

REVIEWER ACTIVITIES

Journals	*IEEE Transactions on Circuits and Systems for Video Technology*

	IEEE Transactions on Medical Imaging
	IEEE Transactions on Biomedical Engineering
	IEE Transactions in Image and Video Processing
	IEE Electronic Letters
	Eurasip Journal on Applied Signal Processing
	Image and Vision Computing
	Journal of Universal Computer Science
	International Journal of Imaging
Conferences	*CMIA 2012*
	LEMEDS 2011
	EMBC 2011, 2010, 2009
	ICIAR 2011, 2010, 2009, 2008, 2007, 2006
	CISP 2010
	ISVC 2010
	PCS 2007, 2009
	BMVC 2004
	VIIP 2003

OTHER DATA

2009	Organizing committee of a one day symposium in medical informatics (2º Simpósio de Informática Médica)
2008	Organizing committee of a one day symposium in medical informatics (1º Simpósio de Informática Médica)
2007	Organized a three day workshop on the topic: Design and Development of Video-Games (CDVJ'07 – Criação e Desenvolvimento de vídeo-jogos). Invited speaker: Verónica Orvalho, UPC, Barcelona. Participation: 30 students of 7 different Portuguese Faculties and Universities.
2003	Collaborated in the organization of the IEEE WIAMIS 2003 conference, at Queen Mary, University of London.
1998	Four month studies at Coventry University, UK, integrated in the European ERASMUS student interchange program. Participated in a collaboration project with a local hospital that consisted in the creation of an on-line telemedicine website. This system allowed encrypted access to a medical database, providing a variety of image processing tools for clinical analysis of visual exams.