

Jaime S. Cardoso

PERSONAL INFORMATION

Full name: Jaime Santos Cardoso
Parents: Albino da Conceição Cardoso
Maria Albertina Fernandes dos Santos Cardoso
Date and Place of Birth: 28th May 1976, Póvoa de Varzim

CONTACT INFORMATION

Professional Address: INESC Porto
Faculdade de Engenharia da Universidade do Porto
R. Dr. Roberto Frias s/n, P-4200-465 Porto, Portugal
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EDUCATION

Doctoral Studies **Feb. 2002 - May 2006**
Faculdade de Engenharia da Universidade do Porto, Porto, Portugal
Doctoral Programme in Electrical and Computer Engineering

- Thesis title: Metadata Assisted Image Segmentation
- Advisor: Professor Luís Corte-Real (FEUP)
- Area of Study: Computer Vision

Master Studies **Sep. 2003 - Nov. 2005**
Faculdade de Ciências da Universidade do Porto, Porto, Portugal
Masters in Mathematical Engineering

- Thesis title: Classification of Ordinal Data
- Advisor: Professor Joaquim F. Pinto da Costa (FCUP)
- Grade: Very Good
- Area of Study: Machine Learning

Graduate Studies (Licenciatura) **Sep. 1994 - Jul. 1999**
Faculdade de Engenharia da Universidade do Porto, Porto, Portugal
Licenciatura in Electrical and Computer Engineering

- Specialization in Telecommunications
- Grade: 19 (out of 20)

ACADEMIC AND
TEACHING
EXPERIENCE

- *Current Position:*
Universidade do Porto, Portugal
 Faculdade de Engenharia, Departamento de Engenharia Electrotécnica e de Computadores (Electrical and Computing Engineering)
Assistant Professor, since 2009
 - Machine Learning (FEUP/PDEEC, T) 2009/10
 - System Integration Laboratory (FEUP/MIEEC, 5^o year, P) 2009/10
 - Vision Based Systems (FEUP/MIEEC, 4^o year, T) 2009/10
 - Seminars (FEUP/PDEEC, T) 2009/10

- **Universidade do Porto**, Portugal
 Faculdade de Engenharia, Departamento de Engenharia Electrotécnica e de Computadores (Electrical and Computing Engineering)
Invited Assistant Professor, from 2006 to 2009
 - Machine Learning (FEUP/PDEEC, T) 2008/09
 - Computer Vision (MAP-i, T) 2008/09
 - Pattern Recognition (FEUP/MIEEC, 4^o year, T) 2008/09
 - Signal and Image Processing in Biophysics (FCUP/MFM, 1^o year, T) 2008/09
 - Multimedia Coding and Processing (FEUP/MIEEC, 4^o year, T) 2008/09
 - Digital Signal Processing (FEUP/MIEEC, 3^o year, P) 2008/09
 - Signals and Systems (FEUP/MIEIC, 2^o year, P) 2008/09
 - System Integration Laboratory (FEUP/MIEEC, 5^o year, P) 2008/09

 - Computer Networks (FEUP/MIEIC, 3^o year, P) 2007/08
 - Numerical Methods (FEUP/MIEEC, 2^o year, P) 2007/08
 - Signals and Systems (FEUP/MIEIC, 2^o year, P) 2007/08
 - System Integration Laboratory (FEUP/MIEEC, 5^o year, P) 2007/08

 - Computer Networks (FEUP/MIEIC, 3^o year, P) 2006/07
 - Programming 2 (FEUP/MIEEC, 2^o year, P) 2006/07
 - Computer Networks (FEUP/MIEEC, 4^o year, P) 2006/07
 - Programming (FEUP/MIEEC, 1^o year, P) 2006/07

- **Universidade do Porto**, Portugal
 Faculdade de Engenharia, Departamento de Engenharia Electrotécnica e de Computadores (Electrical and Computing Engineering)
Invited Assistant, from 2005 to 2006
 - Computer Networks and Data Communication (FEUP/LEEC, 4^o year, P) 2005/06
 - Programming 2 (FEUP/MIEEC, 1^o year, P) 2005/06

- **Universidade do Porto**, Portugal
 Faculdade de Ciências, Departamento de Ciências dos Computadores
Monitor, from 2004 to 2006
 - Software Engineering (FCUP/DCC, P) 2005/06
 - Imperative Programming (FCUP/DCC, P) 2005/06
 - Mathematics for Computer Science (FCUP/DCC, P) 2005/06
 - Operating Systems (FCUP/DCC, P) 2004/05

- **Universidade Católica Portuguesa**, Portugal
 Escola das Artes
Invited Professor, from 2002 to 2004
 - Technologies and Communication 2003/04
 - Technologies and Communication 2002/03

Doctoral Theses

7. André Miguel Passos Baltazar
Title: Composição Musical Algorítmica Baseada na Análise de Sinais Vídeo de Dança
Role: Co-Supervisor
Course: Doctoral Program in Science and Technology of Arts, Escola das Artes, Universidade Católica Portuguesa
Conclusion: 2014 (estimation)
6. Inês Campos Monteiro Sabino Domingues
Title: to be defined
Role: Supervisor
Course: Doctoral Program in Electrical and Computer Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: 2014 (estimation)
5. Ana Maria Silva Rebelo
Title: Reconhecimento óptico robusto de pautas musicais baseado na fusão de regras musicais
Role: Supervisor
Course: Doctoral Program in Electrical and Computer Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: 2012 (estimation)
4. Ricardo Jorge Gamelas de Sousa
Title: Modelos multicritério para a previsão de relações de preferência
Role: Supervisor
Course: Doctoral Program in Electrical and Computer Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: 2012 (estimation)
3. Hélder Filipe Pinto de Oliveira
Title: Modelos Computacionais 3D Avançados para Avaliação do Resultado Estético em Cirurgias Mamárias
Role: Supervisor
Course: Doctoral Program in Electrical and Computer Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: 2012 (estimation)
2. Pedro Miguel Carvalho
Title: Análise e representação de vídeo baseada em modelos 3D
Role: Co-Supervisor
Course: Doctoral Program in Electrical and Computer Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: 2011 (estimation)
1. Susy Cabral da Costa
Title: Previsibilidade do Resultado Estético do Tratamento Conservador do Cancro da Mama
Role: Co-Supervisor
Course: PhD in Medicine, Faculdade de Medicina, Universidade do Porto
Conclusion: 2011 (estimation)

Master Theses

16. Luís Alberto de Sousa Rangel das Neves
Title: Sistema Web Semi-automático para Anotação Colaborativa de Media H.264 e Flash Vídeo
Role: Supervisor

- Course:** Master in Electrical and Computers Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: Feb. 2010
15. Andreas Dieter Mendes Seufert
Title: Investigação e Aperfeiçoamento de Algoritmos de Reconhecimento de Símbolos Musicais
Role: Supervisor
Course: Master in Electrical and Computers Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: Feb. 2010
 14. Pedro Augusto Fernandes Antunes Martins Vitoriano
Title: Avaliação Automática do Resultado de Intervenções Cirúrgicas
Role: Supervisor
Course: Master in Electrical and Computers Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: Feb. 2010
 13. Rui Alexandre Rodrigues Carneiro
Title: Unificação e expansão da interface de pesquisa no webmail
Role: Supervisor
Course: Master in Informatics and Computing Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: Jul. 2009
 12. Sérgio Manuel Colaço de Sá
Title: Adaptação Preditiva de Conteúdo Multimédia
Role: Co-supervisor
Course: Master in Electrical and Computers Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: Jul. 2009
 11. Márcia dos Santos Pinheiro
Title: Sistema Web para o Reconhecimento de Partituras Musicais
Role: Supervisor
Course: Master in Electrical and Computers Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: Jul. 2009
 10. André Miguel Passos Baltazar
Title: Extracção de Informações Rítmicas de Movimentos de Dança Através de um Sinal de Vídeo
Role: Supervisor
Course: Master in Electrical and Computers Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: Feb. 2009
 9. Ricardo Jorge Gamelas de Sousa
Title: Automatic aesthetic evaluation of breast cancer conservative treatment
Role: Supervisor
Course: Master in Engineering Mathematics, Faculdade de Ciências, Universidade do Porto
Conclusion: Nov. 2008
 8. Ana Maria Silva Rebelo
Title: New methodologies towards an automatic optical recognition of handwritten musical scores
Role: Supervisor
Course: Master in Engineering Mathematics, Faculdade de Ciências, Universidade do Porto
Conclusion: Nov. 2008

7. Pedro Luís Cameira Sollari Allegro
Title: Singing Voice Detection in Polyphonic Music Signals
Role: Supervisor
Course: Master in Electrical and Computers Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: Jul. 2008
6. Luís Daniel Torres Rebelo
Title: Avaliação objectiva do resultado estético dos tratamentos do cancro da mama
Role: Supervisor
Course: Master in Electrical and Computers Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: Jul. 2008
5. Luís Miguel Marques Soeiro Batista
Title: Sistema automático de reconhecimento de formulários manuscritos
Role: Supervisor
Course: Master in Electrical and Computers Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: Jul. 2008
4. Luís Jorge Trindade Certo
Title: QuidPyx mobile - Sistema de recomendação de música em dispositivos móveis
Role: Supervisor
Course: Master in Informatics and Computing Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: Jul. 2008
3. João Carlos Loureiro de Jesus Oliveira
Title: A Smarter YouTube - Sistema de organização automática de vídeo com base no seu conteúdo semântico
Role: Supervisor
Course: Master in Informatics and Computing Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: Jul. 2008
2. Guilherme Artur Conceição Capela
Title: Reconhecimento de símbolos musicais manuscritos na framework Gamera
Role: Supervisor
Course: Master in Informatics and Computing Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: Apr. 2008
1. Filipe Emanuel Amaro Coelho
Title: Sistema automático de reconhecimento do montante de um cheque
Role: Supervisor
Course: Master in Informatics and Computing Engineering, Faculdade de Engenharia, Universidade do Porto
Conclusion: Apr. 2008

Research Project Scholarships

2. Jakub Tkaczuk, integrated in the project “Picture Archiving and Communication System with Semantic Search Engine”, since Apr. 2010.
1. Igor Francisco Areias Amaral, integrated in the project “Advanced Objective Method for the Evaluation of the Aesthetical Result of Breast Interventions”, since August 2009.

RESEARCH EXPERIENCE

- *Current Position:*
Project Leader and Researcher at INESC Porto - Instituto de Engenharia de Sistemas e Computadores do Porto since Jan. 2009. Leader of a team of 7 PhD Students, 3 Master Students and 2 Researchers and coordinator as Principal Investigator (PI) of 3 Research Projects.

RESEARCH PROJECTS / GRANTS

7. Principal Investigator (PI) of Semantic PACS (Picture Archiving and Communication System with Semantic Search Engine), funded by the Portuguese Agency for Innovation (ADI), with a budget of 320K EUR for 2009/2011.
6. Principal Investigator (PI) of OMR (Optical Recognition System for Handwritten Music Scores), funded by the Portuguese Foundation for Science and Technology (FCT), with a budget of 50K EUR for 2007/2010.
5. Principal Investigator (PI) of BCCT (Advanced Objective Method for the Evaluation of the Aesthetical Result of Breast Interventions), funded by the Portuguese Foundation for Science and Technology (FCT), with a budget of 95K EUR for 2007/2010.
4. Investigator of the FP7 European Network of Excellence VISNET II, with a funding of 6.2M EUR, for 2006/09.
3. Investigator of the FP6 European Network of Excellence VISNET, with a funding of 2.2M EUR, for 2003/05.
2. Team Coordinator and Investigator of the FP5 European project METAVISION, with a funding of 4.5M EUR, for 2000/03.
1. Team Member of ORBIT (Object Reconfigurable Broadcast Infrastructure Trial), a direct contract with BBC, for 1999/02.

SERVICE TO THE SCIENTIFIC COMMUNITY

- **Organiser** of the first three editions of the “ECE Back to Basics Colloquium”, held weekly at FEUP, the Faculty of Engineering of the University of Porto (UPorto), during the 2nd semester of 2008/09, and 1st and 2nd semesters of 2009/10.

The goal of this colloquium is to promote awareness of fundamental tools and their use in ECE research, to promote interaction between researchers leading to cross-disciplinary research projects, and to raise the awareness of the international research community towards ECE research at UPorto. Every other week a distinguished invited researcher discusses his or her work, focusing on the fundamental mathematical tools that are core to their research. Intended audience includes researchers and graduate students from the different areas in ECE. Local researchers will discuss their work alternating with invited researchers.

- **Reviewer**
 - Journals: IEEE Transactions on Image Processing, IEEE Transactions on Biomedical Engineering, Artificial Intelligence in Medicine (Elsevier), EURASIP Journal on Advances in Signal Processing, EURASIP Journal on Image and Video Processing, Journal of Zhejiang University - Science A, International Journal of Imaging (IJI), International Journal of Pattern Recognition and Artificial Intelligence (IJPRAI), International Journal of Biometrics and Bioinformatics (IJBB), Revista Ibérica de Sistemas e Tecnologias de Informação

- Scientific Committee member of RISTI (Revista Ibérica de Sistemas e Tecnologias de Informação)
- Conferences: International Society for Music Information Retrieval Conference (ISMIR'10); Computational Modeling of Objects Presented in Images (CompIMAGE'10); Conferência Ibérica de Sistemas e Tecnologias de Informação(CISTI'10) International Joint Conference Neural Networks (IJCNN'09, IJCNN'08, IJCNN'07); International Conference on Image Analysis and Recognition (ICIAR'10, ICIAR'09, ICIAR'08, ICIAR'07, ICIAR'06); Doctoral Symposium on Informatics Engineering (DSIE'09); IEEE Globecom Ad Hoc, Sensor and Mesh Networking Symposium (2008); IEEE International Symposium on Information Theory (ISIT'07); Iberian Conference on Pattern Recognition and Image Analysis (ibPRIA'07); European Conference Machine Learning (ECML'05).

LIST OF
PUBLICATIONS

Thesis

2. Jaime S. Cardoso, “Metadata Assisted Image Segmentation”, PhD thesis, Faculdade de Engenharia, Universidade do Porto, 2006.
1. Jaime S. Cardoso, “Classification of Ordinal Data”, MSc thesis, Faculdade de Ciências, Universidade do Porto, 2005.

Papers on Refereed Journals

19. Pedro Carvalho, Jaime S. Cardoso, Luis Corte-Real, “Hybrid framework for evaluating video object tracking algorithms”, *Electronics Letters*, vol. 46, issue 6, pp. 411-412, 2010.
18. Ana Rebelo and Guilherme Capela, Jaime S. Cardoso, “Optical Recognition of Music Symbols: A Comparative Study”, *International Journal on Document Analysis and Recognition*, vol. 13, issue 1, pp. 19-31, 2010.
17. Jaime S. Cardoso, Artur Capela, Ana Rebelo, Carlos Guedes, Joaquim F. Pinto da Costa, “Staff Detection with Stable Paths”, *IEEE Transactions Pattern Analysis Machine Intelligence*, vol. 31, issue 6, pp. 1134-1139, 2009.
16. Maria J. Cardoso, Jaime S. Cardoso, Thomas Wild, Wilfried Krois, Florian Fitzal, “Comparing Two Objective Methods for the Aesthetic Evaluation of Breast Cancer Conservative Treatment”, *Breast Cancer Research and Treatment*, vol. 116, issue 1, pp. 149-152, 2009.
15. Jaime S. Cardoso, Pedro Carvalho, Luis F. Teixeira, Luis Corte-Real, “Partition-distance methods for assessing spatial segmentations of images and videos”, *Computer Vision and Image Understanding*, vol. 113, issue 7, pp. 811-823, 2009.
14. Joaquim F. Pinto da Costa, Hugo Alonso, Jaime S. Cardoso, “The unimodal model for the classification of ordinal data”, *Neural Networks*, vol. 21, pp. 78-91, 2008.
13. Maria J. Cardoso, Andre Magalhaes, Teresa Almeida, Susy Costa, Conny Vrieling, David Christie, Jorgen Johansen, Jaime S. Cardoso, “Is Face-Only Photographic View Enough for the Aesthetic Evaluation of Breast Cancer Conservative Treatment?” *Breast Cancer Research and Treatment*, vol. 112, pp. 565-568, 2008.
12. Maria J. Cardoso, Jaime S. Cardoso, Natalia Amaral, Isabel Azevedo, Lise Barreau, Mario Bernardo, David Christie, Susy Costa, Florian Fitzal, Jose L. Fougho, Jorgen Johansen, Douglas MacMillan, Maria Piera Mano, Lea Regolo, Jose Rosa, Luis F. Teixeira, Conny Vrieling, Janez Zgajnar, “Turning subjective into objective: The BCCT.core software for evaluation of cosmetic results in breast cancer conservative treatment”, *Breast (Elsevier)*, vol. 16, pp. 456-461, 2007.

11. Maria J. Cardoso, Jaime S. Cardoso, A. C. Santos, Conny Vrieling, David Christie, G. Liljegren, Isabel Azevedo, Jorgen Johansen, Jose Rosa, Natalia Amaral, R. Saaristo, V. Sacchini, H. Barros, M. C. Oliveira, "Factors Determining Esthetic Outcome after Breast Cancer Conservative Treatment", *Breast Journal* (Blackwell), pp. 140-146, 2007.
10. Luis F. Teixeira, Jaime S. Cardoso, Luis Corte-Real, "Object segmentation using background modelling and cascaded change detection", *Journal of Multimedia*, vol. 2, pp. 55-65, 2007.
9. Jaime S. Cardoso, Joaquim F. Pinto da Costa, "Learning to classify ordinal data: the data replication method", *Journal of Machine Learning Research*, vol. 8, pp. 1393-1429, 2007,
8. Emanuele Berti, Jaime S. Cardoso, Vitor Cardoso, Marco Cavaglia, "Matched-filtering and parameter estimation of ringdown waveforms", *Physical Review D*, vol. 1, 2007.
7. Jaime S. Cardoso, Maria J. Cardoso, "Towards an intelligent medical system for the aesthetic evaluation of breast cancer conservative treatment", *Artificial Intelligence in Medicine*, vol. 40, pp. 115-126, 2007.
6. Maria J. Cardoso, Jaime S. Cardoso, A. C. Santos, H. Barros, M. C. Oliveira, "Interobserver agreement and consensus over the esthetic evaluation of conservative treatment for breast cancer", *The Breast* (Elsevier), vol. 15, pp. 52-57, 2006.
5. Jaime S. Cardoso, Luis Corte-Real, "A measure for mutual refinements of image segmentations", *IEEE Transactions on Image Processing*, vol. 15, pp. 2358-2363, 2006.
4. Maria J. Cardoso, A. C. Santos, Jaime S. Cardoso, H. Barros, M. C. Oliveira, "Choosing observers for evaluation of aesthetic results in breast cancer conservative treatment", *International Journal of Radiation Oncology*Biological*Physics*, vol. 61, pp. 879-881, 2005.
3. Jaime S. Cardoso, Luis Corte-Real, "Toward a Generic Evaluation of Image Segmentation", *IEEE Transactions on Image Processing*, vol. 14, pp. 1773-1782, 2005.
2. Jaime S. Cardoso, Luis Corte-Real, "Accumulator size minimization for a fast cumulant-based motion estimation", *IEEE Transactions on Circuits and Systems for Video Technology*, vol. 15, pp. 1660-1664, 2005.
1. Jaime S. Cardoso, Joaquim F. Pinto da Costa, Maria J. Cardoso, "Modelling ordinal relations with SVMs: an application to Objective Aesthetic Evaluation of Breast Cancer Conservative Treatment", *Neural Networks* (Elsevier), pp. 808-817, vol. 18, 2005.

Papers on Refereed Conferences

22. Jaime S. Cardoso, Ana Rebelo, "Robust staffline thickness and distance estimation in binary and gray-level music scores", *Proceedings of The Twentieth International Conference on Pattern Recognition (ICPR)*, 2010
21. Jaime S. Cardoso, "Stable Text Line Detection", *Proceedings of IEEE Workshop on Applications of Computer Vision (WACV)*, 2009
20. Ricardo Sousa, Beatriz Mora, Jaime S. Cardoso, "An Ordinal Data Method for the Classification with Reject Option", *Proceedings of The Eighth International Conference on Machine Learning and Applications (ICMLA)*, 2009
19. Jaime S. Cardoso, Ricardo Sousa, Luis F. Teixeira, Maria J. Cardoso, "Breast Contour Detection with Stable Paths", *Communications in Computer and Information Science (CCIS 25)*, pp. 439-452, Springer-Verlag 2009

18. Ana Paula Afonso, Jaime S. Cardoso, Maria João Cardoso, Manuel Pérez Cota, “A Avaliação da Usabilidade de um Sistema Médico Inteligente: BCCT.core”, Proceedings of the 4^a Conferência Ibérica de Sistemas e Tecnologias de Informação (CISTI 2009).
17. Helder Oliveira, Jaime S. Cardoso, “Image Retargeting Using Stable Paths”, Proceedings of the International Conference on Computer Vision Theory and Applications (VISAPP 2009), pp. 40-47, 2009.
16. Jaime S. Cardoso, Artur Capela, Ana Rebelo, Carlos Guedes, “A Connected Path Approach for Staff Detection on a Music Score”, Proceedings of the International Conference on Image Processing (ICIP 2008), pp. 1005-1008, 2008.
15. Jaime S. Cardoso, Luis F. Teixeira, Maria J. Cardoso, “Automatic Breast Contour Detection in Digital Photographs”, Proceedings of the International Conference on Health Informatics (HEALTHINF 2008), vol. 2, pp. 91-98, 2008.
14. Filipe Coelho, Luis Batista, Luis F. Teixeira, Jaime S. Cardoso, “Automatic System for the Recognition of Amounts in Handwritten Cheques”, Proceedings of the International Conference on Signal Processing and Multimedia Applications (SIGMAP 2008), pp. 320-324, 2008.
13. Artur Capela, Ana Rebelo, Jaime S. Cardoso, Carlos Guedes, “Staff Line Detection and Removal with Stable Paths”, Proceedings of the International Conference on Signal Processing and Multimedia Applications (SIGMAP 2008), pp. 263-270, 2008.
12. Ricardo Sousa, Jaime S. Cardoso, Joaquim F. Pinto da Costa, Maria J. Cardoso, “Breast Contour Detection with Shape Priors”, Proceedings of the International Conference on Image Processing (ICIP 2008), pp. 1440-1443, 2008.
11. Artur Capela, Jaime S. Cardoso, Ana Rebelo, Carlos Guedes, “Integrated Recognition System for Music Scores”, Proceedings of the International Computer Music Conference (ICMC 2008), 2008.
10. Ana Rebelo, Artur Capela, Joaquim F. Pinto da Costa, Carlos Guedes, Eurico Carrapatoso, Jaime S. Cardoso, “A Shortest Path Approach for Staff Line Detection”, Third International Conference on Automated Production of Cross Media Content for Multi-channel Distribution (AXMEDIS 2007), pp. 79–85, 2007.
9. Jaime S. Cardoso, Jorge C. Cardoso, Luis Corte-Real, “Object-based spatial segmentation of video guided by depth and motion information”, IEEE Workshop on Motion and Video Computing (WMVC 2007), 2007.
8. Jaime S. Cardoso, “Bandwidth-efficient byte stuffing”, IEEE International Conference on Communications (ICC 2007), pp. 6175-6180, 2007.
7. Jaime S. Cardoso, Maria J. Cardoso, “Breast Contour Detection for the Aesthetic Evaluation of Breast Cancer Conservative Treatment”, Springer Lecture Notes in Computer Science, Advances in Soft Computing 45, Computer Recognition Systems 2 CORES 2007: 5th International Conference on Computer Recognition Systems, pp. 518-525, 2007.
6. Margarita Kotti, Luis Gustavo P.M. Martins, Emmanouil Benetos, Jaime S. Cardoso, Constantine Kotropoulos, “Automatic Speaker Segmentation Using Multiple Features and Distance Measures: A Comparison of Three Approaches”, Proceedings of International Conference on Multimedia & Expo (ICME), pp. 1101-1104, 2006.
5. Joaquim F. Pinto da Costa, Jaime S. Cardoso, “Classification of Ordinal Data Using Neural Network”, Proceedings of European Conference on Machine Learning (ECML), pp. 690-697, 2005.

4. Jaime S. Cardoso, Joaquim F. Pinto da Costa, Maria J. Cardoso, "SVMs Applied to Objective Aesthetic Evaluation of Conservative Breast Cancer Treatment", Proceedings of International Joint Conference on Neural Networks (IJCNN) 2005, pp. 2481-2486, vol. 4, 2005.
3. P. W. Walland, G. Thomas, M. Koppetz, Jaime S. Cardoso, T. Erseghe, F. Hericourt, "The Application of Intimate Metadata in Post Production", Proceedings of Int. Broadcasting Convention (IBC 2002), 2002.
2. Jaime S. Cardoso, J. C. Alves, Luis Corte-Real, "FPGAs based hardware applied to block-based motion estimation for real-time video processing", Proceedings of 11th Portuguese Conference on Pattern Recognition (RECPAD2000), pp. 455-458, 2000.
1. Telmo Cunha, Phillip Tome, Sergio Cunha, Jaime S. Cardoso, Luisa Bastos, Utilizacao de DGPS para a Monitorizacao de Frotas em Ambiente Urbano, Actas da 2 Conferencia Nacional de Cartografia e Geodesia, 1999.

Last updated: May 10, 2010