

Personal information



José Jasnau Caeiro



Lote 316 CCI-26, Rua de Guimarães
Vila Nova de Santo Estêvão
2130-127 Santo Estêvão BNV
Portugal

+351 926 178 177 +351 263 949 091

[j.caeiro\[at\]ieee.org](mailto:j.caeiro[at]ieee.org)

sepsi.ipbeja.pt/jasnau.html

Gender male | Date of birth 15/03/1963 | Nationality(-ies) Portugal

WORK EXPERIENCE

18/10/1996 until now

assistant professor

Instituto Politécnico de Beja

R. Pedro Soares, Campus do Instituto Politécnico de Beja (<http://www.ipbeja.pt>)

Supervision of applied research projects, mainly in computer and electronics applications, head of SEPSI lab (Electronic Systems, Signal Processing and Instrumentation Laboratory) (<http://sepsi.ipbeja.pt>), applied research activities, teaching Data Structures and Algorithms, Image Processing, Biometrics, Programming Languages at undergraduates and MSc students, selection juries, membership of scientific council.

16/9/1991 to 15/12/1992

assistant professor (invited)

Escola Superior Náutica Infante D. Henrique

Av. Eng. Bonneville Franco 2770-058 - Paço d'Arcos, Portugal

Teacher of Computer Science Introductory Courses
member of scientific council.

22/1/1990 to 15/9/1991

assistant professor (invited)

Escola Superior de Tecnologia/Instituto Politécnico de Setúbal

Campus do IPS - Estefanilha, 2910-761 Setúbal

Teacher of Digital Systems and Introduction to Systems.

5/1988 until now

Invited researcher

SIPS (Signal Processing Systems Group)/INESC-ID Lisboa

Rua Alves Redol 9, Lisboa, Portugal, (<http://sips.inesc-id.pt/>)

research and development activities in image and signal processing and pattern recognition.

4/1/2014 until now

head of SEPSI lab

Instituto Politécnico de Beja

<http://sepsi.ipbeja.pt>

In charge of the research laboratory in electronics, pattern recognition, signal processing and instrumentation laboratory. Original member of this laboratory.

2009 to 2014 **UBINET**
Instituto Politécnico de Beja
R. Pedro Soares, Campus do Instituto Politécnico de Beja (<http://www.ipbeja.pt>)
Founding member of this research lab in computer security. Member of the coordination commission.

21/5/1987 to 30/4/1988 **assistant teacher**
Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa
Campus de Campolide 1099-085 Lisboa
teaching Electromagnetism and introductory Modern Physics, research in Surface Physics

11/11/1985 to 29/4/1988 **undergraduate teaching assistant**
Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa
Campus de Campolide 1099-085 Lisboa
teaching Electromagnetism and introductory Modern Physics

EDUCATION AND TRAINING

9/07/2010 **Doutor em Engenharia Electrotécnica e de Computadores**
PhD in Electrical and Computer Engineering EQF level 8
Instituto Superior Técnico da Universidade Técnica de Lisboa, Portugal
Image Processing/Pattern Recognition

9/1989 to 9/7/1993 **Mestre em Engenharia Electrotécnica e de Computadores (ramo Electrónica e Computadores)**
MSc. in Electrical and Computer Engineering (Electronics and Computers branch) EQF level 7
Instituto Superior Técnico da Universidade Técnica de Lisboa, Portugal
Image Processing/Pattern Recognition

9/1981 to 12/1986 **Licenciado em Engenharia Física e dos Materiais (ramo Engenharia Física)**
Licentiate in Physics and Materials Engineering (Physics Engineering branch) EQF level 6
Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa, Portugal
Applied Physics 5 year degree

1980 to 1981 **12.º ano** EQF level 5
Escola Secundária de Olivais-Chelas, Portugal
Secondary school level (access to University)

1978 to 1980 **Electronics and Telecommunications** EQF level 4
Escola Secundária Afonso Domingues, Lisboa, Portugal
industrial school degree

PERSONAL SKILLS

Mother tongue(s) Portuguese

Other language(s)	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	C1	C1	C1
German	B1	B2	B1	B1	B1
Spanish	B1	B2	B1	B1	A2
French	A2	B1	B1	B1	A2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user
Common European Framework of Reference (CEF) level

Communication skills Very used to talk to audiences and to plan presentations in english and portuguese.

Job-related skills Excellent knowledge of advanced *software development tools*
Consciousness of deadlines and the need for planning ahead
Organisation
Autonomy

Computer skills Excellent computer skills. Knowledge acquired as a teacher and in research.
Microsoft OS and Linux OS, namely office tools, scientific writing tools, programming tools, mathematical tools (MATLAB).
Excellent computer security knowledge since I had a 5 year work in this area. Excellent programming knowledge with *scripting* languages (namely Python).

Other skills Chess playing and essay writing.

References

- [1] João C. Martins, José Caeiro and Leonel Sousa, *Nonlinear System Identification Using Constellation Based Multiple Model Adaptive Estimators*, 22nd European Signal Processing Conference (EUSIPCO 2014), Lisbon, 2014.
- [2] Henrique Oliveira, Paulo Lobato Correia and José Caeiro, *Accelerated Unsupervised Filtering for the Smoothing of Road Pavement Surface Imagery*, 22nd European Signal Processing Conference (EUSIPCO 2014), Lisbon, 2014.
- [3] João Martins, and José Jasnau Caeiro, *A new approach to system identification and parameter tuning with multiple model adaptive estimators*, 2011 7th International Symposium on Image and Signal Processing and Analysis (ISPA), Dubrovnik, pp. 72-77, 2011.
- [4] João C. Martins, José Jasnau Caeiro and Leonel A. Sousa, *On the Use of Adaptive Model Constellations in Multiple Model Adaptive Estimators*, 17th Portuguese Conference on Pattern Recognition (RecPad 2011), Porto, pp. 108-109, 2011.
- [5] Henrique Oliveira, José Jasnau Caeiro and Paulo Lobato Correia, *Improved road crack detection based on one-class Parzen density estimation and entropy reduction*, 17th IEEE International Conference on Image Processing (ICIP), Hong Kong, pp. 2201-2201, 2010, 10.1109/ICIP.2010.5653305.
- [6] José Jasnau Caeiro and Moisés Piedade, *Mixed exponentials filter for edge detection and the Fredholm integral equation of the first kind*, IEEE International Conference on Image Processing (ICIP), Barcelona, pp. 441-444, vol. 2, 2003, 10.1109/ICIP.2003.1247276.
- [7] José Jasnau Caeiro and Armando Ventura, *Estimation of Antibacterial Culture Activity from Digital Images*, Iberian Conference on Pattern Recognition and Image Analysis (IbPRIA), Palma de Mallorca, LNCS Springer-Verlag, pp. 354-359, 2003, 10.1007%2f978-3-540-44871-6_41.
- [8] José Jasnau Caeiro and Edgar Ataíde, *Image Processing and a Python-GIMP Based Algorithm Development Environment*, Visualization, Imaging, and Image Processing (VIIP), Benálmadena, 2003.
- [9] Henrique Oliveira and José Jasnau Caeiro, *Automatic Rural Road Extraction from Sets of Connected Edge Points*, International Conference on Enterprise Information Systems (ICEIS 2001), Kluwer, pp. 59-70, 2001.
- [10] Manuel Duarte Ortigueira, Leonel Sousa, José Jasnau Caeiro and João C. Martins, *2D Discrete-Time Fractional Linear Systems*, In Proceedings of the 3rd Conference on Telecommunications, CONFTELE 2001, Aveiro, Portugal, April 2001.
- [11] José Jasnau Caeiro and Moisés Piedade, *Errors in the estimation of gradient direction using IIR and FIR implementations*, IEEE International Conference on Image Processing (ICIP), Washington, pp. 137-140, vol. 2, 1995, 10.1109/ICIP.1995.537433.
- [12] Leonel Sousa, José Jasnau Caeiro and Moisés Piedade, *An advanced architecture for image processing and analysis*, IEEE International Symposium on Circuits and Systems (ISCAS), Singapore, pp. 77-80, vol. 1, 1991, 10.1109/ISCAS.1991.176277.
- [13] Leonel Sousa, Moisés Piedade and José Jasnau Caeiro, *A High Performance Image Processing System*, IEEE International Symposium on Circuits and Systems (ISCAS), 1990, 10.1109%2fISCAS.1990.112188.
- [14] Moisés Simões Piedade, Leonel Sousa, José Jasnau Caeiro and Teresa Mendes de Almeida, *Processamento de Imagem e suas Aplicações*, In 4^{as} Jornadas de Informática da Universidade da Beira Interior, Covilhã, March 1991.
- [15] Moises Simões Piedade, Leonel Sousa, José Jasnau Caeiro, Teresa Mendes de Almeida and Walter Vieira, *Processamento de Imagem e suas Aplicações - Perspectivas de Evolução Futura*, In 3^o Encontro Português de Computação Gráfica, Coimbra, October 1990.
- [16] José Jasnau Caeiro, *Técnica de Processamento de Sinais com Transformadas Baseadas em Ondulas*, Revista Portuguesa de Engenharia Electrotécnica, n^o 348, pp. 299-304, 1992.

Thesis

References

- [1] José Jasnau Caeiro, *Detecção e Agrupamento de Contornos*, Instituto Superior Técnico/Universidade Técnica da Lisboa 2010. Supervised by Prof. Moisés Simões Piedade. Jury: Luís Borges de Almeida, Moisés Simões Piedade, Mário Alexandre Teles de Figueiredo, Luis António Serralva Vieira de Sá, Aurélio Joaquim de Castro Campilho, Leonel Augusto Pires Seabra de Sousa, João Raposo Sanches.
- [2] João Carlos da Silva Martins, supervisors: Leonel Sousa and José Jasnau Caeiro, Computational Models, *Neuronal Metrics and System Identification in Bioelectronic Vision* Electrical and Computer Engineering Ph.D. thesis at the Instituto Superior Técnico of the University of Lisbon, 2013.
- [3] David António Barrocas do Nascimento Palma, *Sistema Distribuído de Detecção de Intrusões*, MSc. in Computer Security Engineering at the Instituto Politécnico de Beja, 2014.

Projects

References

- [1] IPTAADE- *Detecção de Actividade Anti-Bacteriana*, POSI/SRI/355588/00, 2001-2005.
- [2] *Georeferenced Airport Obstruction Chart*, ESA (European Space Agency), 01-01-2009 until 31-10-2013.

Reviewer

References

- [1] [Pattern Recognition](#), published by Elsevier-Pergamon.
- [2] [Signal Image and Video Processing](#), published by Springer-Verlag.
- [3] [Signal Processing](#), published by Elsevier.

Memberships

Member of the *Signal Processing and Computer Society* of the IEEE (Institute of Electrical and Electronic Engineers) since 1989.

OTHER JOB RELATED ACTIVITIES

Comittees

- Member of the coordination group of MSc in Computer Security Engineering lectured in IPBeja;
- Member of selection juries for candidates to BSc in Computer Science degree lectured in IPBeja;
- Supervisor of more than 60 BSc thesis in FCT/UNL; IST/UTL and IPBeja;
- Member of more than hundred juries for BSc. thesis;
- Member of the scientific council for over 15.