



Pedro Guedes de Oliveira

Education

- “Licenciatura” in Electrical Engineering at the Faculty of Engineering of the University of Porto (FEUP), in 1968
- PhD in Electrical Engineering at the University of Aveiro, in 1981

Professional Experience

- From 1969 to 1974
Researcher at the Physics Department of the Nuclear Physics and Engineering Laboratory (LFEN), Lisbon
- From November 1974 to 1993
Professor at the University of Aveiro,
- Since 1993
Professor at FEUP

Research Interests

- Analogue and Digital Electronic Circuits
- Biomedical Engineering
- Signal Processing

Teaching Interests

- Electronics
- Signal Processing

Recent Academic and R&D Management Positions

- Since March 2010
Member of the Scientific Council of FEUP
- Since March 2010
Head of the ECE Department at FEUP
- Since 2009
Member of the General Council of the University of Porto
- From 2005 till March 2009
Non-executive member of Innovation Agency Board
- From 2004 till March 2010
Member of the Executive Commission of ECE Department at FEUP
- Since 2007
Member of the Board of FCCN, the Foundation for National Scientific Computing
- Since 2006
Member of the joint Fraunhofer–Portugal programme Steering Committee
- From 2005 till 2009
Non-executive member of the board of the Portuguese Innovation Agency (AdI)
- From 1988 till June 2005
President of INESC Porto
- Since 1991
Executive member of the Board of INESC

Other Positions

- From 1988 till August 2005
President of the board of FiberSensing, a spin-off company of INESC Porto
- 2001
Member of the Board Oporto European Capital of Culture Society
- Since 2001
Member of the Investment Committee of an investment fund, sponsored by BPI, Gulbenkian Foundation and the European Investment Bank
- From 1998 till August 2007
Member of the Board of TV Tel, a cable tv operator, in representation of a VC investor

Recent participation in Research Projects

- Since September 2010
"Self-organising power management in a photovoltaic power production facility"
Portugal|CMU programme; Project CMU-PT/SIA/0005/2009
- From September 2009 till August 2010
"Design of an Integrated Circuit for a Wireless Receiver"
University of Porto; Project IPG148/2009
- Since January 2007
"Critical Systems and Risk Analysis"
Portugal|CMU programme
- From June 2004 till May 2007
"VLSI – CMOS analog implementation of a biologically realistic associative memory"
FCT; Project POCTI/ESE/48649/2002
- From January 2002 to September 2003
"Genius: Generic E-learning Environments and Paradigms for the new Pan European Information and Communication technologies Curricula"
European Commission

International Journal Publications

- "Freeman olfactory cortex model : a multiplexed KII network implementation" Vítor Manuel Grade Tavares, Tabarce Marian, José Carlos dos Santos Carvalho Principe, Pedro Guedes de Oliveira Journal of Analogue Integrated Circuits and Signal Processing, Vol.50 n° 3, pp.251-259, 2007
- "Programmable analogue VLSI implementation for asymmetric sigmoid neural activation function and its derivative" S. Tabarce, Vítor Manuel Grade Tavares, Pedro Henrique Henriques Guedes de Oliveira IEE Electronics Letters, Vol.41 n° 15, pp.863-864, 2005
- "A new and fast nonlinear method for association analysis of biosignals" João Cunha, Pedro Henrique Henriques Guedes de Oliveira IEEE Transactions on Biomedical Engineering, Vol.47 n° 6, pp.757-763, 2000
- "Influence of Epileptogenic Foci in Background Activity: A Clinical Study Using Nonlinear Association" João Cunha, Pedro Guedes de Oliveira, António Jorge Martins, D. Mendonça Computerized Measures Epilepsia, Vol.36, pp.-, 1995
- "The gamma filter : a new class of adaptive IIR filters with restricted feedback" José Carlos dos Santos Carvalho Principe, DeVries B. DeVries B., Pedro Guedes de Oliveira IEEE TRANSACTIONS ON SIGNAL PROCESSING, Vol.41 n° 2, pp.649-656, 1994
- "SCALP EEG RECORDING - INTERICTAL ICTAL LOCATION AND SPREADING OF EPILEPTIFORM EVENTS" António Silva, João Cunha, Pedro Guedes de Oliveira ACTA NEUROLOGICA SCANDINAVICA, Vol.89 n° Sup.152, pp.-, 1994
- "AN EXPERIMENTAL STUDY ON VOICE/DATA INTEGRATION OVER AN ETHERNET LAN" J. Azevedo, J.A. Martins, Pedro Guedes de Oliveira IFIP TRANSACTIONS C (COMMUNICATION SYSTEMS), Vol.V n° 23, pp.-, 1994
- "The gamma filter: a new class of adaptive iir filters with restricted feedback" José Principe, DeVries B. , P. Guedes de Oliveira IEEE TRANS. ON SIGNAL PROCESSING, Vol. 41 n°12, pp.649-656, 1993

- "M-MODE ECHOCARDIOGRAPHY STUDY OF 22 TOP CLASS RACING CYCLISTS" F. Sepúlveda, E. de Oliveira, Pedro Guedes de Oliveira, E. Macedo, et al JOURNAL OF SPORTS MEDICINE AND PHYSICAL FITNESS, Vol.29 n° 2, pp.-, 1989
- "HIDRA : a hierarchical instrument for distributed real-time analysis of biological signals" Pedro Guedes de Oliveira, José Principe, A. M. Cruz, A. M. Tomé IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING, Vol.34 n° 12, pp.921-927, 1987
- "A STUDY ON THE BEST ORDER FOR AUTOREGRESSIVE EEG MODELING" Francisco Vaz, Pedro Guedes de Oliveira, José Principe INTERNATIONAL JOURNAL OF BIO-MEDICAL COMPUTING, Vol.20 n° 1-2, pp.-, 1987
- "BEST ORDER VARIABILITY OF AUTOREGRESSIVE EEG MODELIN" Francisco Vaz, Pedro Guedes de Oliveira, José Principe ELECTROENCEPHALOGRAPHY AND CLINICAL NEUROPHYSIOLOGY, Vol.61 n° 3, pp.-, 1985
- "SPIKE DETECTION BASED ON A PATTERN-RECOGNITION APPROACH USING A MICROCOMPUTER" Pedro Guedes de Oliveira, C. E. Queiroz ELECTROENCEPHALOGRAPHY AND CLINICAL NEUROPHYSIOLOGY, Vol.56 n° 1, pp.-, 1983
- "MULTIPROCESSOR ELECTROENCEPHALOGRAM (EEG) ANALYZER" Pedro Guedes de Oliveira, José Principe, A. M. Cruz, A. M. Tomé IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING, Vol.30 n° 8, pp.-, 1983
- "A MICROCOMPUTER-BASED SYSTEM FOR THE DETECTION AND QUANTIFICATION OF EPILEPTIC TRANSIENTS" Pedro Guedes de Oliveira, C. E. Queiroz, F Silva ELECTROENCEPHALOGRAPHY AND CLINICAL NEUROPHYSIOLOGY, Vol.52 n° 3, pp.-, 1981
- "SPATIAL AND TEMPORAL COMPUTER DISPLAYS OF EPILEPTIFORM TRANSIENTS" Pedro Guedes de Oliveira, R. J. Wilkus, N. J. I. Mars ELECTROENCEPHALOGRAPHY AND CLINICAL NEUROPHYSIOLOGY, Vol.52 n° 3, pp.-, 1981
- "A TOPOGRAPHICAL DISPLAY OF EPILEPTIFORM TRANSIENTS BASED ON A STATISTICAL APPROACH" Pedro Guedes de Oliveira, F Silva ELECTROENCEPHALOGRAPHY AND CLINICAL NEUROPHYSIOLOGY, Vol.48 n° 6, pp.-, 1980
- "DETECTION, CLASSIFICATION AND DISPLAY OF EEG EPILEPTIFORM TRANSIENTS - A PATTERN-RECOGNITION STUDY" F Silva, Pedro Guedes de Oliveira, M. Rolfkwee, K. Van Hulten ELECTROENCEPHALOGRAPHY AND CLINICAL NEUROPHYSIOLOGY, Vol.50 n° 3-4, pp.-, 1980