<div align="center">

Curriculum Vitæ
2006

</div>

Name: Joaquim P. Marques de Sá
Date of birth: 26/9/46
Nationality: Portuguese
Address: INEB-FEUP, Rua Dr. Roberto Frias s/n, 4200-465 Porto
Telephone: +351-225081828   Email: jmsa@fe.up.pt

Academic Degrees:
Aggregation in Electrotecnical Engineering, Faculty of Engineering, University of Porto (FEUP), 1991.
Ph.D. Electrotecnical Engineering (Signal Processing), FEUP, 1984.
MD Electronic Engineering, Netherlands Univ. Found. for Int. Co-operation, 1971.
Graduated in Electrotechnical Eng., FEUP,1969.

Academic Positions:
Full Professor (Computers and Digital Systems) at the Dep. Elect. Eng. and Computers (DEEC), FEUP.
Member of the Steering Committee for the FEUP Biomedical Engineering Ph.D. Programme.
Director of the Master Degree Course on Biomedical Engineering, FEUP (1995-2003).
Researcher of INEB (Instituto Nacional de Engenharia Biomédica) since its foundation (1989).
Chairman of INEB Researchers Council (1993-2002).
Director of INEB Signal Processing Group (since 1994).

Research interests:
Physiologic Signal Analysis.
Pattern Recognition
Nuronal Networks.

Research Activity:
Responsible by Biomedical Signal and Image projects (ECG, CTG, ICG, 2-D ECO, etc.) sponsored by national and european programmes (Commett, Biomed, Esprit, Telematics, Leonardo da Vinci).
Co-operation with Spain (LABEIN), France (Lyon, INSERM 281), Germany (Darmstadt, IGD) and Czech Republic (Technical University of Brno).
Co-author of automatic analysis and diagnostic systems for ECG and echocardiography installed in S.João Hospital, Porto.
Co-author of fetal CTG automatic monitoring system (SisPorto$^{®}$) installed in several (10, presently) portuguese hospitals and abroad (Holland, Brazil).
Reviewer of "IEEE Tr. on Accoustics, Speech and Signal Processing", "IEEE Tr. on Circuits and Systems", "IEEE Tr. on Biomedical Engineering", "IEEE Tr. on Systems, Man and Cybernetics", "Medical & Biological Engineering & Computing", "International Journal of Neural Systems".

Memberships, chairs:
Portuguese Society of Biomedical Engineering (founding member).
Portuguese Association of Pattern Recognition (founding member) .
Member of the Governing Board of the International Association of Pattern Recognition (1987-1991).
Member of the Scientific Committees of two national and one international Congress (BioSignal).
Member of the Organization and Scientific Committees of two European COMETT seminars in image processing.
Chairman of the "1st Portuguese Congress on Biomedical Engineering".
Chairman of the "Summer School on Neural Networks" (http://www.nn.isep.ipp.pt/) annually held at Porto since 2002.

Published works :
Over 200 papers, mostly in the Biomedical Engineering field.

Books:

In Portuguese:
J.P. Marques de Sá, J.P. Canas Ferreira (1995) *Programação Prática em Turbo Pascal*. Editorial Presença, Colecção Sistemas - Nova Série, n.º 20.

J.P. Marques de Sá, J.J. Pinto Ferreira (1998) *Introdução à Programação em Delphi 3*. FCA-Editora de Informática, 1998.

J.P. Marques de Sá (2004) *Fundamentos de Programação usando C*. FCA, Editora de Informática.

J.P. Marques de Sá (2006) *O Acaso*. Gradiva

In English:
J.P. Marques de Sá (2001) *Pattern Recognition. Concepts, Methods and Applications*. Springer-Verlag.

J.P. Marques de Sá (2003) *Applied Statistics Using STATISTICA, SPSS and MATLAB*. Springer-Verlag. (Second edition in preparation.)

Papers in Neural Networks (in the last 2 years; more in http://paginas.fe.up.pt/~nnig/):

L. M. Silva, C. S. Felgueiras, L. A. Alexandre, J. Marques de Sá (2006). Error entropy in classification problems: a univariate data analysis. Neural Computation, 18:2036-2061.

L. A. Alexandre, J. Marques de Sá (2006) Error Entropy Minimization for LSTM Training. In: Artificial Neural Networks-ICANN 2006, Lecture Notes in Computer Science, Springer-Verlag, pp. 244-253.

Jorge M. Santos, Luís A. Alexandre, J. Marques de Sá (2006) Modular Neural Network Task Decomposition Via Entropic Clustering. 6th International Conference on Intelligent Systems Design and Applications - ISDA2006, (proceedings to be published by IEEE), Jinan, China.

Luís M. Silva, J. Marques de Sá, and Luís A. Alexandre (2006). New developments of the Z-EDM algorithm. 6th International Conference on Intelligent Systems Design and Applications - ISDA2006 (proceedings to be published by IEEE),. Jinan, China.

Jorge M. Santos, J. Marques de Sá, Luís A. Alexandre (2005). Neural networks trained with the EEM algorithm: Tuning the smoothing parameter. WSEAS Transactions on Systems. Issue 4, volume 4, pp. 295-300.

Jorge M. Santos, J. Marques de Sá, Luís A. Alexandre (2005) Batch-sequential algorithm for neural networks trained with entropic criteria. LNCS 3697. Proceedings of the 15th Int. Conf. on Artificial Neural Networks, pp. 91–96.

L. M. Silva, J. Marques de Sá, L. A. Alexandre (2005). Neural network classification using Shannon's entropy. 13th European Symposium on Artificial Neural Networks, pp. 217-222.

J. Marques de Sá, C. Felgueiras (2005). Perceptron learning with discrete weights. 13th European Symposium on Artificial Neural Networks*, pp. 235-240.

L. M. Silva, L. A. Alexandre, J. Marques de Sá (2005). Neural network classification: Maximizing zero-error density. International Conference on Advances in Pattern Recognition, United Kingdom, LNCS 3686, pp. 127-135.