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CURRICULUM VITAE

Dr Konstantinos D. Koutroumbas

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RESEARCH INTEREST AREAS

- Pattern Recognition
- Neural Networks
- Remote sensing applications using pattern recognition techniques
- Ionospheric data processing using time series analysis techniques
- Signal processing with pattern recognition techniques
- Medical applications using pattern recognition and neural networks techniques
- Financial applications using neural networks techniques
- Artificial Intelligence

TRAINING

Oct. '84 - July '89: BSc Degree from the Department of Computer Engineering and Informatics of the University of Patras, Greece.

Sept. '89 - Sept. '90: MSc at distinction level in "Advanced Methods in Computer Science" from the Queen Mary & Westfield College of the University of London, United Kingdom.

March '91 - Febr '95: PhD in Informatics from the Department of Informatics and Telecommunications of the University of Athens.

RESEARCH AND PROFESSIONAL EXPERIENCE

Dec. '91 - Jan. '94: Scientific collaborator in the Institute of Information Science of the Hellenic Productivity Center (ELKEPA), Athens, Greece. Involvement in research and development projects such as STRIDE Hellas, TEMPUS.

Jan. '94 - Febr. '95: Researcher in the Department of Informatics of the University of Athens. Involvement in research projects, which were funded by the Greek government (PENED, PABE).

Jan. '95 – July '96: Fullfilment of military obligations.

Jan. '96 – Oct. '98: Preparation of the book “Pattern Recognition”, with prof. S. Theodoridis, which has been published by Academic Press in 1998. This was the best selling book for Academic Pres in 2000. This book is proposed as reference text in several university departments in the frame of the pattern recognition or other related courses.

Sept. '96 - Aug. '97: Lecturer in the Department of Informatics of the University of Ioannina, Greece. Teaching of the semester courses: “Pattern Recognition”, “Expert Systems” and “Operating Systems”.

Sept. '97 – March. '01 : Computer Scientist specialist in the Hellenic Telecommunications Organization (OTE).

Jan. '98 – Dec. '99: Involvement in the project titled “*Hector – Software for the Automated Reading of printed and hand written characters*”, which was funded by the Greek government (PABE'96).

Apr. '01 – May '06: Assistant researcher in the Institute of Space Applications and Remote Sensing of the National Observatory of Athens, in the areas of pattern recognition, telecommunications, signal processing and remote sensing.

Sept. '01 – March. '03: Preparation of the second edition of the book “Pattern Recognition”, co-authored by prof. S. Theodoridis. This is an enhanced version which appeared in March of 2003.

Sept. '03 - Aug. '04: Guest Editor for a special issue of the IEEE Transactions on Plasma Science, titled «*Space Weather Dynamics and Effects on Technology*», which was published in August 2004.

May '04 – May '06: Involvement in the DIAS project (“*DIAS - Digital upper Atmosphere Server*”), which was funded by the *eContent* program of EEC. The coordinator of the program was the National Observatory of Athens. The aim of the project was the

development of a Paneuropean digital data collection for the state of the upper atmosphere, based on both historical data and real time observations gathered by five digital ionospheric stations located in selected areas in Europe and owned by Research Institutes that belong to the Public Sector.

Sept. '04 – Sept. '05: Involvement in the project titled “*Operational system for designing and decision making for the management of forest fires*”, coordinated by the School of Chemical Engineering of the National Technical University of Athens and funded by the Greek government (GGET).

Sept. '04 – March. '06: Preparation of the third edition of the book “Pattern Recognition”, co-authored by prof. S. Theodoridis. This is an enhanced version compared to the previous ones, which appeared in 2006.

May '06 -: Associate researcher in the Institute of Space Applications and Remote Sensing of the National Observatory of Athens, in the areas of pattern recognition, telecommunications, signal processing, remote sensing and processing of ionospheric data.

Jan. '07 – Aug. '08: Preparation of the fourth edition of the book “Pattern Recognition”, co-authored by prof. S. Theodoridis. This is an enhanced version compared to the previous ones, which appeared at the end of 2008.

May '07 – Nov. '07: Involvement in the project LUCAS STUDIES LOT 1-Landscape classification and more specifically in the development of a system that categorizes the European landscape with appropriate utilization of digital orthophotomaps and landscape images, which was funded by EUROSTAT. The project was coordinated by the “GEOAPEIKONISIS S.A.” company.

Sept. '07 – Sept. '08: Involvement in the project titled “*Solar Wind driven autoregression model for Ionospheric short term Forecast (SWIF)*”, which was funded by EOARD. The aim was the development of improved models suitable for short term prediction of the foF2 parameter in the middle latitudes.

Jun. '08 – Sept. '09: Preparation of the book titled “Introduction to Pattern Recognition: A MATLAB Approach”, in cooperation with S. Theodoridis, A. Pikrakis, D. Cavouras. The book appeared in March 2010.

TRAINING EXPERIENCE

A. Teaching experience

Sept. '90 -: Implementation of courses for various Greek organizations/companies on basic principles in computer science and elementary mathematics.

Jan. '96 - June '96, Jan. '98 - June '98, Jan. '99 - June '99, Jan. '00 - June '00: Involvement in the teaching of the course “Neural Networks and Optical Computers” which was available at the third semester of the postgraduate program of the Department of Informatics and Telecommunications of the University of Athens.

Sept. '96 - Aug. '97: Responsible for the teaching of the courses “Pattern Recognition”, “Operating Systems” and “Expert Systems”, at the undergraduate level in the Computer Science Department of the University of Ioannina.

B. Involvement in students' thesis

- Supervision of 3 thesis in the undergraduate level in the Department of Informatics and Telecommunication of the University of Athens.

REVIEW ACTIVITIES

Served as a reviewer for manuscripts that considered for publication in the following journals:

- Neural Networks
- IEEE Transactions on Signal Processing
- IEEE Transactions on Communications
- IEEE Transactions on Circuits and Systems II: Analog and Digital Signal Processing
- IEEE Transactions on Neural Networks

Served as a reviewer for manuscripts that considered for publication in the proceedings of the following conferences:

- EUSIPCO '98
- SETN '02
- SETN '06
- SETN '10
- ICASSP '10
- ICANN '10
- IJCNN '10

INVOLVEMENT IN CONFERENCES ORGANIZATION

- Member of the scientific committee of the 2nd Hellenic Conference in Artificial Intelligence (2002).
- Member of the organizing committee of the NATO Advanced Research Workshop on Effects of Space Weather on Technology Infrastructure (ESPRIT) (2003).
- Member of the program committee of the 4th Hellenic Conference in Artificial Intelligence (2006).
- Member of the program committee of the 6th Hellenic Conference in Artificial Intelligence (2010).
- Member of the program committee of the International Conference on Artificial Neural Networks, ICANN2010 (2010).