# **Curriculum vitae**

## of Dimitrios Syndoukas

#### Degrees

- Degree in the Physics department of the Faculty of Science of the University of Patras, with a grade of 7.87
- Degree in the Informatics Department of the Faculty of Physical Sciences and Technology of the Open Hellenic University (Patra), with a grade of 8.43
- PhD from the University of Patras with the title: "Color Image Processing with Non-Linear Methods"

### Academic positions

 Assistant Professor in the Department of IT Applications in Administration and Economy (TEI of Western Macedonia), which was renamed Department of Business Administration (TEI of Western Macedonia) in 2013, which became Department of Business Administration (Western Univ of Macedonia) in 2019.

### • Academic activities

- Teaching the courses: Operating Systems (Unix), Computer Programming (C language),
   Object Oriented Programming (C++ language), Data Structures and Databases,
   Multimedia Technologies, Cloud Computing, Health Information Systems, Data
   Structures and Algorithms (Python), Signal and Image Processing, in undergraduate
   level at TEI of Western Macedonia and at University of Western Macedonia
- Teaching the courses: Multimedia Technologies and Internet, Graphics Virtual Reality, in postgraduate level in the MSc of the Department of Applied Informatics of the University of Macedonia (Thessaloniki)
- Teaching the courses: Modern applications information technology in business and the economy and Web Applications Development, in the MBA of the Department of Business Administration of the University of Western Macedonia

## • Administrative positions

- Head of the Department of IT Applications in Administration and Economy from 2009 to 2013
- Deputy President of the Department of Business Administration since 2018
- Member of the research committee of TEI of Western Macedonia for two terms
- Member of numerous administrative committees

#### Honors

- Scholarship from the Greek Institution of Government Scholarships (IKY) during his studies at the Physics Department
- Scholarship from the Finnish government during preparation of the PhD thesis, at the Tampere Polytechnic in Finland

#### Other activities

 Visitor at the Electronics department of the Polytechnic of Bucharest, where he gave a lecture on contemporary voice coding methods, under the European Community program TEMPUS

#### Research activity

- Participation in a transnational research project, among the Department of Medicine
  of the University of Patras and the corresponding department in Italy entitled:
  "Multiparametric study of voice abnormalities in patients with neurological diseases",
  a result of which was a program in C++ that 'runs' under the Windows OS and utilizes
  a card based on the TMS320C30 digital signal processor for voice sampling and
  analysis. The program was subsidized by G.G.E.T.
- Participation in a research program of the Physics Department of the University of Patras with the title: "Color image processing with non-linear methods'. The program was also subsidized by G.G.E.T.
- Scientific Officer of the program "Processing and animation enhancement" 2019-2020, of the University of Western Macedonia

### Papers and publications

The interests of Dimitrios Syndoukas can be found in signal processing and especially image and video, in neural networks and artificial intelligence. The following publications are listed as indicative:

## • Peer-reviewed journals

- «Algorithms for Color Image Edge Enhancement using Potential Functions», D.
   Sindoukas, N. Laskaris and S. Fotopoulos, IEEE Signal Proc. Letters, vol. 4, no. 9, pp. 269-272, Sept. 1997.
- «A heuristically enhanced gradient approximation (HEGA) algorithm for training neural networks», D. Panagiotopoulos, C. Orovas and D. Syndoukas, Neurocomputing, vol. 73, No 7-9, pp. 1303-1323, March 2010.

#### • Conference proceedings/announcements

- «Distance Weighted Multichannel Filters», D. Sindoukas, S. Fotopoulos and G. Economou, ECCTD '95, Istanbul, Turkey, pp. 829-832, Aug. 1995.
- «Multichannel Distance Filtering of Seismic Electric Signals», G. Economou, A. Ifantis and D. Sindoukas, EUSIPCO '96, Trieste, Italy, Vol I, pp. 89-92, 1996.
- «On-line Monitoring of the Heart Rate Variability Spectral Parameters of Patients after Myocardial Infarction in Intensive Coronary Unit», A. Bezerianos, A. Brikou, D. Alexopoulos, D. Sindoukas and R. Lontis, IEEE Computers in Cardiology 1996, pp. 501-504.
- «Image Enhancement using Color and Spatial Information», S. Fotopoulos, D. Sindoukas, N. Laskaris and G. Economou, ICASSP '97, Munich, Germany, April 1997.
- «Color image enhancement using local density function estimators», D. Sindoukas, G.
   Economou, A. Ifantis and S. Fotopoulos, DSP '97, 13th International Conference on
   Digital Signal Processing, Santorini, Greece, July 2-4, Vol.2, pages 551-554, 1997.
- «A Comparison of Spatio-temporal Filters for Color Video Denoising», D. Syndoukas, SEEDA-CECNSM 2020, Corfu, Greece, 2020.

## Books/book chapters

## Teaching aids

- Notes entitled: "Introduction to the C language programming"
- Series of laboratory exercises for the C language programming
- Series of laboratory exercises for the C++ language programming

-