

CURRICULUM VITAE Dr. DIMITRIS FOTIADIS

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PROFILE

Assistant Professor in University of Western Macedonia, School of Applied Sciences, Informatics Department, located at Kastoria – Greece, teaching Sequential Diaital Svstems. Combinational Diaital Svstems. Microcomputer/Microprocessor technology, Final Year Student Seminar and Electronic Physics, Introduction to Informatics, Electronics. More than twenty three (23) years of experience in telecommunications industry, army optoelectronic systems and teaching in a Higher education level Institution. Proven history in electronics engineering, broadband wireless telecommunication systems design and integration, project management and research in the telecommunications, electronics, robotics and microcomputer systems, biomedical engineering. Director of the Lifelong Learning Center of University of Western Macedonia since 2020. Director of Microprocessor-Microcontroller, Automatic Control and Robotic Systems Laboratory of Informatics Department. Ability to fluently talk and work in both Greek and English languages. Computer literate in multiple software applications and programming languages. Excellent interpersonal and analytical skills.

EDUCATION

Aristotle University of Thessaloniki – Greece Medical Informatics Lab 2010 - 2016

PhD at Medical Informatics Lab, Aristotle University of Thessaloniki, with subject "Medical Instrument position tracking inside human body, using wireless technology"

University of Hertfordshire – U.K. 1996 – 1997

M.Sc. in Electronics (Digital Systems) Thesis title: Efficient A/D conversion methods

Technological Educational Institution of Thessaloniki – Greece 1992 – 1996 Degree in Electronics Engineering

TRAINING COURSES

- Short course on the context of the **EU/IST INTRALED** project on "Low-Power Design", AIT (Athens Institute of Technology) 19.5 km Markopoulou Ave., Peania, Attiki, Greece, 2003 – 2004
- Training course named "Programming in C, C++, Java", AIT (Athens Institute of Technology) 19.5 km Markopoulou Ave., Peania, Attiki, Greece, course duration 36 hours, 2005

WORK EXPERIENCE

2016 – today Assistant Professor in University of Western Macedonia, Informatics Department (former Technological Educational Institution of Western Macedonia, Department of Informatics Engineering), Kastoria – Greece

Teaching courses as Microcomputers/Microprocessors I and II, Introduction to Informatics, Electronics Physics, Electronics. Counselor of Kastoria Robotics student team, a group of students, professors and assistant staff performing research and various projects on Robotics technological field. Extensive research on Biomedical Engineering sector. Supervisor of a very large number of student dissertations.

2008 – 2016 Lecturer in Technological Educational Institution of Western Macedonia, Department of Informatics Engineering, Kastoria – Greece

Lecturer teaching Combinational Digital Systems, Sequential Digital Systems, Microcomputer/Microprocessor technology, Final Year Student Seminar and Electronic Physics since March 2008.

2006 – 2008 Electronics engineer working for the Greek Armed Forces, Velestino - Greece

Provided maintenance and repair engineering solutions on Krauss-Maffei Wegmann (KMW)-built Leopard battle tank and more specifically on its optoelectronic and pure electronic equipment.

1999 – 2006TelecommunicationsSystemsDesignerInINTRACOMS.A., Athens - Greece

R&D engineer at the R&D Department, Access Networks and Transmission Division. Designer of baseband parts of wireless Point-to-Point (PDH) and Pointto-Multipoint (TDMA, TDD or OFDM based) systems. System integrator for the above mentioned products. Offered technical/financial consulting support for INTRACOM S.A. promotion of its wireless products range to potential customers/operators worldwide (Telefonica (Argentina, Brazil), Sonera (Finland), France Telecom (France), Matav (Hungary), Personal (Paraguay), Romtelecom (Romania), Cegetel (France), Embratel (Brazil), Antenna Hungaria (Hungary), DANCOM (Pakistan), Vodafone (Greece), Forthnet (Greece), Quest Wireless (Greece), OTE (Greece), and many more).

PUBLICATIONS

BOOKS

Dimitris Fotiadis, Microprocessors – Microcontrollers. 8051 Microcontroller, First Edition, Self Edition, 2010, ISBN 978-960-93-1790-0

Dimitris Fotiadis, Aristogiannis Garbis, Introduction to Computers and Informatics, 1st Edition, Athens, 2015, ISBN 978-960-9474-12-2

CONFERENCE PEER REVIEWED PAPERS

1. Dimitris Fotiadis, Vasilis Kasouras and Ilias Panayiotopoulos

"i-BRAIN: A Broadband Radio Access Interactive Network. Challenging the Barriers of the Last-Mile Wireless Infrastructure Concept," 80 IEEE International Conference on Telecommunications, ICT'2001, 4 – 7 June 2001, Bucharest, Romania

2. Dimitris Fotiadis and lakovos Theodosopoulos

"4G – The way to future communications" 1st Panhellenic Conference on Electronics and Telecommunications, EL&TE, 20 – 22 March 2009, Patra, Greece

3. D. Fotiadis, A. Astaras, P. Bamidis, K. Papathanasiou, A. Kalfas

"Proposed UWB Real-Time Position Tracking System for a Cardiological IVUS Catheter", ICGST Conference on Computer Science and Engineering, CSE-11, Dec. 19 – 21 2011, Istanbul, Turkey

4. D. Fotiadis, A. Astaras, P. Bamidis, K. Papathanasiou, A. Kalfas

"Novel position tracking method of a medical instrument", 19th Congress of the European Society of Biomechanics, ESB2013, Aug. 25 – 28 2013, Patra, Greece

5. D. Fotiadis, A. Astaras, P. Bamidis, K. Papathanasiou, A. Kalfas

"Displacement measurement of a medical instrument inside the human body" 13th Mediterranean Conference on Medical and Biological Engineering and Computing, MEDICON2013, IFMBE Proceedings 41, p. 1539ff., Sep. 25 – 28 2013, Sevilla, Spain

6. D. Fotiadis, P. Bamidis, A. Kalfas, A. Astaras, K. Papathanasiou

"A novel frequency domain signal processing method for an intra-operative position tracking system", 6th Panhellenic Conference on Biomedical Technology (ELEVIT/IFMBE), May 6-8 2015, Athens, Greece

7. D. Fotiadis, A. Astaras, A. Kalfas, P. Bamidis

"A novel signal processing method based on the frequency modality for intrabody medical instrument tracking", 5th International Conference on Modern Circuits and Systems Technologies (MOCAST), May 12-14 2016, Thessaloniki, Greece

8. D. Fotiadis

"State-of-the-art sensors in computer-based simulation systems for medical education", 4th International Conference on Medical Education Informatics (M.E.I. 2021), July 12-15 2021, Nottingham, U.K.

JOURNAL PAPERS

1. D. Fotiadis, A. Astaras, P. Bamidis, K. Papathanasiou, A. Kalfas

"An innovative UWB Real-Time Position Tracking System proposal, for a Cardiological IVUS catheter", BIME Journal, Volume 12, Issue 1, December 2012

2. **D. Fotiadis, A. Astaras, P. D. Bamidis, K. Papathanasiou, and A. Kalfas** "Experimental evaluation of an invasive medical instrument based on a displacement measurement system", IEEE J. Biomed. Health Inform., vol. 19, no. 5, pp. 1707–1717, 2015

3. **D. Fotiadis, K. Papathanasiou, A. Astaras, P. D. Bamidis, and A. Kalfas** "A novel signal processing method based on frequency modality for intra-body medical instrument tracking", International Journal of Computing, Volume 14, Issue 1, April 2015

PATENTS

- 1. "Radio-Frequency Apparatus, Method and Positioning", US Provisional Patent Application, Application number 61810732.
- 2. "Radio wave position tracking system", Greek Industrial Property Organization (OBI) patent number 1008740 (11-4-2016)

SCIENTIFIC ORGANIZATIONS PARTICIPATION

- IEEE (Intitute of Electrical and Electronics Engineers) member
- ESB (European Society of Biomechanics) member
- Greek National Biomedical Technology Institute member
- Scientific and Professional Technological Education Engineers Society member

ADDITIONAL INFORMATION

- Director of University of Western Macedonia Lifelong Education Training Center.
- Director of Microprocessor/Microcontroller, Robotics and Automated Control Systems Lab in University of Western Macedonia, Informatics Department.
- Visiting lecturer, teaching Undergraduate and Postgraduate courses at Department of Computer Engineering, University of Lusiada in Lisbon, Portugal in the context of ERASMUS framework (9-13 March 2015).
- Visiting lecturer, teaching Undergraduate and Postgraduate courses at Faculty of Electrical Engineering and Computer Science, University of Maribor, Slovenia in the context of ERASMUS+ framework (7-10 March 2016).
- Visiting lecturer, teaching Undergraduate courses at Faculty of Management and Social Communication, Department of Informatics, Andrzej Frycz Modrzewski Krakow University, Polland in the context of ERASMUS+ framework (20-23 January 2020).
- PhD thesis Supervisor with subject: Automated stress detection methods, using wearable sensors and complex data processing.
- Supervisor of more than thirty (30) completed Undergraduate student dissertations.
- Member of multiple student dissertation examination commities.
- IEEE Transactions on Biomedical Circuits and Systems Journal reviewer
- Large microprocessor/microcontroller family programming knowledge (Intel 8051, Zilog Z80, Motorola 68000, Analog Devices ADSP-21xx).
- Cadence circuit design and simulation experience using Verilog-AMS programming language.
- Various design platform experience for the design and simulation of electronic circuits.
- Scientific Board Committee Member of various Conference or Festivals.

PERSONAL INFORMATION

- Gender: Male
- Date of Birth: 26 August 1973
- Place of Birth: Edessa Greece
- Marital Status: Married
- Children: two