

## CV - Dr. SOTIRIS KARABETSOS, Assoc. Professor

### • PERSONAL INFORMATION

KARABETSOS Sotiris

Date of birth: 04-04-1976

Nationality: Greek

Marital status: Married, with 3 children

Department URL: <http://www.eee.uniwa.gr/el/> or <http://www.eee.uniwa.gr/en/>

TelSiP Laboatory URL: <http://telsip.uniwa.gr/en/homepage/>

### • EDUCATION

- **2010** PhD in Electrical and Computer Engineering

School of Electrical and Computer Engineering, National Technical University of Athens, Greece

- **2003** Master (M. Sc.) in Data Communication Systems

Electronic & Electrical Engineering Department, Brunel University, London, UK.

- **2004** Degree (M. Eng. Diploma) in Electrical and Computer Engineering, School of Electrical and Computer Engineering, National Technical University of Athens (N.T.U.A.)

- **1999** B. Sc. in Electronics Engineering, Technological Educational Institution (T.E.I.) of Athens.

### • CURRENT POSITION(S)

**2021 – Today:** Associate Professor - Department of Electrical and Electronics Engineering, Faculty of Engineering, University of West Attica, Egaleo – Athens, Greece.

### • PREVIOUS POSITIONS

**2018 – 2021:** Assistant Professor - Department of Electrical and Electronics Engineering, Faculty of Engineering, University of West Attica, Egaleo – Athens, Greece.

**2016 – 2018:** Assistant Professor - Department of Electronic Engineering, Technological Educational Institution (TEI) of Athens, Greece

**2011 – 2015:** Lecturer - Department of Electronic Engineering, Technological Educational Institution (TEI) of Athens, Greece

**2017 – 2021:** Scientific Advisor, Speech technologies, SAMSUNG Electronics Korea και SAMSUNG Hellas SA, Innoetics Research group

**2003 – 2016:** Collaborative Researcher in contractual position (2003-2015) and Collaborative Academic Staff as an Assistant Prof. (2016) - Voice & Sound Technology Department, Institute for Language and Speech Processing (ILSP) / “ATHENA” Research Center, Greece.

**2004-2006/ 2008-2010:** Lecturer (Laboratory Instructor) in contractual position - Department of Electronics Engineering, Technological Educational Institution (TEI) of Athens.

### • SUPERVISION OF GRADUATE STUDENTS

**2011 – Today:** Supervised of more than 30 Bsc. Theses at TEI of Athens and University of West Attica as well as two Msc Thesis and one Msc Thesis and one PhD coaching at National Kapodestrian University of Athens (NKUA).

### • TEACHING ACTIVITIES

**2018 – Today:** Teaching the courses: ▪ Telecommunications, ▪ Digital Technologies of Speech and Audio Signals, ▪ Broadband Transmission Technologies and ▪ Design of Telecommunication Systems, at the Department of Electrical and Electronics Engineering, University of West Attica

**2018 – Today:** Teaching of the Software Defined Radio Msc. course and co-teaching of the 4G and 5G Telecommunication Systems Msc. course at the Data Communications and Networking Msc. program at the Department of Electrical and Electronics Engineering, University of West Attica

**2016 – Today:** Teaching the Telecommunication Subsystems M.Sc. course at the National Kapodestrian University of Athens (NKUA), Department of Informatics & Telecommunications

**2004 – 2018:** Teaching and co-teaching of theoretical and laboratory courses including, •Telecommunication Networks, •Digital Communications, •Digital Signal Processing, •Optical Communications, •Digital Signal Processing of Image and Sound at the Department of Electronics Engineering, TEI of Athens.

**2015 – 2018:** Teaching part of the Next Generation Telecommunication Systems M.Sc. course at TEI of Athens, Department of Electronics

- **ACADEMIC ACTIVITIES & ORGANISATION OF SCIENTIFIC EVENTS**

**2017** Member of the Local Organizing Committee of the international Global Engineering Education conference IEEE EDUCON 2017.

**2016** Member of the Organizing Committee for the Special Session HuBIC 2016 at the 20th Panhellenic Conference on Informatics (PCI 2016)

**2014** Member of the Technical Program Committee of the international conference: The 6th IEEE & Texas Instruments EDERC 2014 (European Embedded Design in Education & Research) Conference

Reviewer for several international journal and conferences including: IEEE Signal Processing Letters, IEEE Photonics Technology Letters, SpringerPlus Journal / Springer-Verlag, Recent Patents on Electrical & Electronic Engineering / Bentham Science Publishers, Optics Express (OSA), Optical Fiber Technology (Elsevier).

- **INSTITUTIONAL RESPONSIBILITIES**

**2021 - Director** of the “Telecommunications, Informatics and Signal Processing” division at the Department of Electrical and Electronics Engineering

**2011 – Today:** Administrative work and participation in several evaluation committees as a president or member for the needs of the TEI of Athens and the University of West Attica.

- **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

Member of the IEEE (Institute of Electrical and Electronic Engineering)

Member of the Technical Chamber of Greece (TEE)

- **PUBLICATIONS, RESEARCH PROJECTS & SCIENTIFIC INTERESTS**

Participated in more than 20 European and National funded research and development projects in the area of broadband communications as well as signal and speech processing. Published work include 14 journal papers and 2 book chapters, 7 chapters in collaborative volumes and 38 publications in international conference proceedings. Research interests include broadband telecommunications with emphasis on transmission/modulation schemes for conventional telecommunication networks (wired, wireless and optical networks) as well as 4G, 5G and hybrid Fiber-Wireless networks, Radio-over-Fiber systems and optical communications with advanced modulation formats, digital signal processing with emphasis on speech technologies (speech analysis, coding, synthesis and recognition and machine learning and pattern recognition for application in the aforementioned topics. Co-founding member of the established “Telecommunications, Signal Processing and Intelligent Systems Laboratory (TelSiP)”.

- **SELECTED PUBLICATIONS**

- Nikas, T., Pikasis, E., Karabetsos, S., Syvridis, D., "Compensation of Multicore Fiber Skew Effects for Radio over Fiber mmWave Antenna Beamforming", IEEE Journal of Lightwave Technology, DOI: 10.1109/JLT.2019.2961557, December, 2019.

- Zantalis F., Koulouras G., Karabetsos S. and Kandris D., “A review of Machine Learning and IoT in Smart Transportation”, Future Internet, MDPI, 11(4), 94, doi: 10.3390/fi11040094, 2019

- E. Pikasis, S. Karabetos, T. Nikas, P. Chvojka, A. Nassiopoulou, D. Syvridis, “*Comparison of CAP and DFT-spread DMT for high speed transmission over 50m SI-POF*”, in proc. of IEEE 10th International Symposium on Communication Systems, Networks and Digital Signal Processing (CSNDSP 2016), DOI: 10.1109/CSNDSP.2016.7573941, July, 2016
- Raptis S., Karabetos S., Chalamandaris A., Tsiakoulis P., "A Framework towards Expressive Speech Analysis and Synthesis with Preliminary Results", Journal on Multimodal User Interfaces (JMUI), DOI: 10.1007/s12193-015-0186-3, Vol. 9, Issue 4, pp. 387-394, Springer, 2015.
- G. Stoumpis, S. Karabetos, A. Nassiopoulou, "An Experimental Framework for Studying LTE and LTE-Advanced", in proc. 19th Panhellenic Conference on Informatics (PCI 2015), ICPS Series, ACM Digital Library, doi10.1145/2801948.2801985 pp. 275-280, 2015
- Karabetos S., Stoumpis G., Pikasis E., Nikas T., Papanikolaou J., Koulouras G. and Nassiopoulou A., “*Deployment of 5GHz Real-Time Simplex Wireless SISO- And MISO-OFDM Transmission Using Matlab and the TMS320C6713 DSKs*”, in Proc. 6th Texas Instruments & IEEE European Embedded Design in Education and Research Conference (EDERC 2014), Milan, Italy, 11-12 September, 2014.
- Pikasis, E., Karabetos, S., Nikas, T., Syvridis, D., "Rate-adaptive DFT-spread DMT and CDMA-DMT for 1-mm SI-POF short-range links", IEEE Photonics Technology Letters 25 (16), pp. 1574-1577, 2013.
- S. Karabetos, E. Pikasis, T. Nikas, A. Nassiopoulou and Syvridis, D., "DFTspread DMT modulation for 1-Gb/s transmission rate over 100 m of 1-mm SIPOF", IEEE Photonics Technology Letters, 24(10), pp. 836-838, 2012.
- Karabetos S., Tsiakoulis P., Chalamandaris A., Raptis S., "One-Class Classification for Spectral Join Cost Calculation in Unit Selection Speech Synthesis", IEEE Signal Processing Letters, August 2010, Vol. 17, No. 8, pp. 746-749, 2010.
- S. Karabetos, S. Mikroulis, and A. Nassiopoulou, "Radio over Fiber for Broadband Communications: a promising technology for Next Generation Networks", Book Chapter in “Handbook of Research on Heterogeneous Next Generation Networking: Innovations and Platform”, (Eds. Prof. S. Kotsopoulos and Dr. K. Ioannou), ISBN: 978-1-60566-108-7, Ref: IGR26196, Information Science Reference (an imprint of IGI Global), IGI Global, pp. 80-103, 2009.