Konstantinos Barlas

Laboratory Teaching Staff

Education and Training

2018   **PhD**, *National Technical University of Athens*, School of Electrical and Computer Engineering
Topic: Algebraic Specifications of Standards.

01.03.2013 – 31.07.2013   **Researcher**, *University of Tampere*, Tampere, Finland
Research on Formal Specifications of Open Standards / Creative Commons.

2006   **Integrated Master Degree in Applied Mathematical and Physical Sciences**, *National Technical University of Athens*, Athens

2006   **Degree in Applied Mathematical and Physical Sciences**, *National Technical University of Athens*, Athens
Specialized in Statistics and Computer Science Mathematics.

Work Experience

01.09.2021 – Present   **Laboratory Teaching Staff**, *University of West Attica*, Department of Informatics and Computer Engineering
Teaching to undergraduate students:
○ Mathematical Analysis
○ Discrete Mathematics
○ Probabilities and Statistics
(Full time)

01.02.2021 – 31.07.2021   **Laboratory Technical Staff**, *University of West Attica*, Department of Informatics and Computer Engineering
Teaching "Probabilities and Statistics" to undergraduate students, part time

01.09.2018 – 30.08.2021   **Laboratory Technical Staff**, *University of West Attica*, Department of Informatics and Computer Engineering
Teaching to undergraduate students:
○ Mathematical Analysis
○ Linear Algebra
○ Discrete Mathematics
○ Probabilities and Statistics
(Full time)

01.01.2017 – 31.08.2018   **Laboratory Technical Staff**, *Department of Computer Engineering*, Piraeus University of Applied Sciences, Piraeus, Greece
Teaching Robotics, Full time

03.03.2013 – 31.12.2016   **Administration and Management of I.T. and Teaching support**, *Technological Educational Institute of Piraeus*, Piraeus, Greece
(Full time)

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01.03.2013 – 31.05.2013	**Teaching Assistant / Lecturer**, *University of Tampere*, Tampere, Finland

01.03.2013 – **Teaching Assistant / Lecturer**, *University of Tampere*, Tampere, Finland
31.05.2013
- Assisted with the teaching of "OpenSource and Software Quality", taught for the Master's programme in Computer Science and Master's program in Software Development.
- Gave 3 lectures about my research work and how that relates to the course.

09.2006 – **College Lecturer**, *Technological Educational Institute of Piraeus*, Piraeus, Greece
06.2010 Course subject: Numerical Analysis using mathematical packages (matlab, mathematica). Part Time.

01.07.2002 – **I.T. & teaching support of taught subjects**, *Technological Educational Institute*
31.05.2005 *of Piraeus*, Piraeus, Greece

Worked by contract employment for the entire duration minus 3 months.

01.10.2002 – **Mathematics teacher (7th grade students)**, *Hellenic American Educational*
22.12.2002 *Foundation*, Athens College, Athens, Greece

Personal Skills

Languages

	Understanding		Speaking		Writing
	Listening	Reading	Spoken Interaction	Spoken Production	
English	C2	C2	C2	C2	C2
	Proficiency degree from Cambridge University				
	Proficiency degree from Michigan University				
German	B1	B1	A2	A2	A2
	Grundstuffe degree from Goethe Institut				

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

Publications

Journals

1. **2016**: Konstantinos Barlas, Eleni Berki, Petros Stefaneas and George Koletsos, "Towards formal open standards: formalizing a standard's requirements", Innovations in Systems and Software Engineering (ISSN (Online): 1614-5054, DOI: 10.1007/s11334-016-0283-9), a NASA Journal.
2. **2010**: Konstantinos Barlas, George Koletsos, Petros Stefaneas, Iakovos Ouranos, "Towards a correct Translation from ASN.1 into CafeOBJ", Special Issue on Innovations in Intelligent Systems and Applications of Reasoning-based Intelligent Systems (IJRIS, ISSN (Online): 1755-0564 - ISSN (Print): 1755-0556).

Conferences

1. **2020**: Konstantinos Barlas, Petros Stefaneas, "An algebraic schema for JSON", PCI 2020 Proceedings of the 24th Panhellenic Conference on Informatics, Athens, Greece, November 20-22, 2020, `https://doi.org/10.1145/3437120.3437268`.
2. **2014**: Konstantinos Barlas, Eleni Berki, Iulia Adomnita, Thrushna Nalam, Golnaz S. Nejad, Jari Veijalainen, Petros Stefaneas, and George Koletsos, "Formal Specification of Open Standards and the Case of RSS v2.0", PCI '14 Proceedings of the 18th Panhellenic Conference on Informatics, `http://dl.acm.org/citation.cfm?doid=2645791.2645809`.
3. **2013**: Juri Valtanen, Konstantinos Barlas, Eleni Berki, Mirjan Merruko, "Problem-Focused Education in the Understanding of Open Source and Software Quality", INSPIRE (INternational conference in Software Process Improvement in Research Education and training) Conference 2013, London, U.K., September 5-6. (Award for best remote presentation).
4. **2012**: Katerina Ksystra, Nikolaos Triantafyllou, Konstantinos Barlas and Petros Stefaneas, "An Algebraic Specification of Social Networks", in Proceedings of the International Software Quality

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Management (SQM) and INSPIRE conferences. E. Berki, J. Valtanen, P. Nykänen, M. Ross, G. Staples and K. Systä, Eds, pp. 135-146, Tampere, Finland, August 21-23, 2012.

5. **2012**: Konstantinos Barlas, G. Koletsos, P. Stefaneas, "Extending standards with formal methods: Open Document Architecture", International Symposium on Innovations in Intelligent Systems and Applications (INISTA 2012), Trabzon, Turkey, July 2-4, 2012, `http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6246931&isnumber=6246930`.

6. **2009**: K. Barlas, G. Koletsos, P. Stefaneas and I. Ouranos, "Towards a correct translation from ASN.1 into CafeOBJ", International Symposium on Innovations in Intelligent Systems and Applications (INISTA 2009), Trabzon, Turkey, June 29 - July 1, 2009, pp. 141-145.

7. **2009**: Konstantinos Barlas, George Koletsos, Petros Stefaneas, Iakovos Ouranos, "From ASN.1 into CafeOBJ: Some first steps", 2009 Fourth South-European Workshop on formal methods (SEEFM 09), Thessaloniki, Greece, December 5 2009, pp. 66-72.

8. **2007**: Iakovos Ouranos, Petros Stefaneas, Kostas Barlas, Stefanos Demertzis, George Koletsos, Panayiotis Frangos, "Modelling Real Time Authentication Protocols using Algebraic Specification Techniques-the case of TESLA protocol", Proc. IFIP TC7 Conference, Krakow, July 2007, pp. 338-389.

Workshops

1. **2011**: Second Romanian - Japanese Algebraic Specification Workshop, March 1-4, 2011, Sinaia, Romania, `http://www.imar.ro/~diacon/sinaiaWorkshop2011/poster.html`.

2. **2010**: EELAK (GFOSS) Conference 2010, May 14, Athens, Greece.

Posters

1. **2015**: Konstantinos Barlas, Eleni Berki, Petros Stefaneas and George Koletsos, "Towards Formal Open Standards: The Case of RSS v2.0", poster presentation at the Thales Workshop: Algebraic modeling of topological and computational structures and applications, National Technical University of Athens, July 1-3, 2015.

Misc

Schools

1. **2010**: JAIST Advanced School on Formal Specification and Systems Verification 2010 (JAIST-FSSV2010), March 1st - 5th, Ishikawa, Japan, `http://www.ldl.jaist.ac.jp/jaist-fssv2010/`.

2. **2008**: Sinaia School on Formal Verification of Software Systems, 3 - 10 March 2008, Sinaia, Romania, `http://www.imar.ro/~diacon/sinaiaschool.html`.

Seminars

1. **2013**: Inforte 2013: Security of e-Systems and Computer Networks, `http://inforte.jyu.fi/events/sec_esystem`.

2. **2013**: TISE Course: Natural language, language technology and textual information retrieval.

Projects

○ THALIS (2012 - 2015): I have participated in the Research Funding Program THALIS, co-financed by the European Union (European Social Fund – ESF) and Greek national funds through the Operational Program "Education and Lifelong Learning" of the National Strategic Reference Framework (NSRF).

○ Research proposal preparation for R&D funding about Open Standards & Creative Commons with European and International Collaboration.

References

○ Dr. Eleni Berki, Adjunct Professor of Software Quality and Formal Modelling, Department of Computer Science and Information Systems, Faculty of Information Technology, University of

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○ Dr. Petros Stefaneas, Department of Mathematics, School of Applied Mathematical and Physical Sciences, Polytexneioupoli Zografou, Iroon Polytexneiou 9, 157 80, Athens, Greece.

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