

Curriculum vitae

PERSONAL INFORMATION

Polydoros Petrakis

 Heraklion (Greece)

 ppetrak@cs.teicrete.gr

WORK EXPERIENCE

2011–Present

Experienced with:

- System level & NoC modeling using gem5 Simulator
- NoC modeling in OMNeT++ Simulator
- SystemC, SystemC-AMS
- Linux scripting & administration
- Simulation data extraction & management
- Minor experience with Linux drivers & ARM FastModels
- Development on Zedboard
- Arduino, STM32Fxxx, ESP8266 microcontrollers & sensors
- 3D Printing, 3D scanning, 3D modeling

01/2014–Present

Research & development

TEI of Crete

"FP7/ICT Integrated Project - DREAMS Distributed REal-Time Architecture for Mixed Criticality Systems" (Grant Agreement Number 610640, <http://www.dreams-project.eu/>)

08/2015–06/2016

Research & development

TEI of Crete

FP7/ICT Collaborated Project – SAVE Self-Adaptive Virtualization-Aware High-Performance/Low-Energy Heterogeneous System Architectures" (Grant Agreement 610996, <http://www.fp7-save.eu/>)

01/2014–11/2015

Research & development

TEI of Crete

Archimedes III project

01/2013–09/2015

Research & development

TEI of Crete

FP7/ICT Collaborative Project - TRESCCA Trustworthy Embedded systems for Secure Cloud Computing Applications (Grant Agreement Number 318036, <http://www.trescca.eu/>)

11/2011–12/2013

Research & development

FP7/ICT collaborative Project – vrtical SW/HW extensions for virtualized heterogeneous multicore platforms (<http://www.vrtical.eu/>)

07/2013

Research & development

Participated in development of the open source library HSoC.

<https://sourceforge.net/projects/hsoc/>

2010–Present

Publications

- M.D. Grammatikakis, A. Papagrigoriou, P. Petrakis, G. Komaros, and M. Coppola, "**High-Level Security Services based on a Hardware NoC Firewall Module**", in Proc. Workshop on Intelligent Solutions in Embedded Systems, Ancona, Italy, 28-30 October 2015, pp. 73-78.
- M.D. Grammatikakis, A. Papagrigoriou, P. Petrakis, K. Harteros and G. Komaros, "**Load Balancing, Broadcast, and Scatter Primitives for Efficient Multicore Applications**", in Proc. Workshop on Intelligent Solutions in Embedded Systems, 2015 pp. 23-28.
- Kyprianos Papadimitriou, Polydoros Petrakis, Miltos D. Grammatikakis, Marcello Coppola, "**Security Enhancements for building saturation-free, low-power NoC-based MPSoCs**". CNS 2015: 594-600
- M.D. Grammatikakis, K. Papadimitriou, P. Petrakis, A. Papagrigoriou, G. Komaros, I. Christoforakis, O. Tomoutzoglou, G. Tsamis and M. Coppola, "**Security in MPSoCs: A NoC Firewall and an Evaluation Framework**", IEEE Transactions on TCAD, 99, 2015, pp. 1–14.
- M.D. Grammatikakis, A. Papagrigoriou P. Petrakis, M. Coppola, "**System-Level Modeling and SystemC**", Eds. M. Grant, L. Lavagno and I. Markov, EDA for Integrated Circuits Handbook Handbook, Taylor & Francis Group, CRC Press, Chapter 12 (30 pages), 2015, to appear.
- M. D. Grammatikakis, K. Papadimitriou, P. Petrakis, A. Papagrigoriou, G. Komaros, I. Christoforakis and M. Coppola, "**Security Effectiveness and a Hardware Firewall for MPSoCs**", 16th IEEE International Conference on High Performance Computing and Communications - Workshop on Multicore and Multithreaded Architectures and Algorithms, 2014, pp. 1032-1039.
- M. D. Grammatikakis, A. Papagrigoriou, P. Petrakis and G.Komaros, "**Monitoring-Aware Virtual Platform Prototype of Heterogeneous NoC-based Multicore SoCs**", 16th Euromicro Digital Systems Design Conf. (DSD), 2013, pp. 497–504.
- M. D. Grammatikakis, A. Papagrigoriou, P. Petrakis and G. Komaros, "**Non-Intrusive NoC DFS for Soft Real-Time Multimedia Applications**", 16th Euromicro Digital Systems Design Conf. (DSD), 4-6 2013, pp. 60-63.
- Nikos Papadakis, Polydoros Petrakis, Dimitris Plexousakis, Harris Manifavas, "**A Solution to the Ramification Problem Expressed in Temporal Description Logics**", International Journal of Semantic Computing 01/2014
- NikosPapadakis, PolydorosPetrakis, DimitrisPlexousakis, Haridimos Kondylakis, "**A Solution to the Ramification Problem Expressed in Temporal Description Logics**", 4th International Workshop on New Forms of Reasoning for the Semantic Web: Scalable & Dynamic-NEFoRS2010co-located with the 7th Extended Semantic Web Conference (ESWC2010)

EDUCATION AND TRAINING

09/2000–09/2009

Computer Scientist

Computer Science Department, University of Crete, Heraklion (Greece)

PERSONAL SKILLS

Mother tongue(s)

Greek

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	English FCE, Grade A				
German	Grundstufe, Grade: 109.75 / 120.0				

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
 Common European Framework of Reference for Languages

Job-related skills

- C/C++/SystemC
- Bash scripting

- Java, Prolog, Python
- Latex