

## A. EDUCATION

### NATIONAL TECHNICAL UNIVERSITY OF ATHENS

- 2017** PhD School of Electrical and Computer Engineering.  
Thesis title: "Enabling Reasoning and Verification Support for Intelligent Agent Systems, using Formal Methods".  
Supervisor: Prof. Petros Stefaneas, Prof. Panayiotis Frangos  
Ph.D. Degree Examination : December 2017
- 2001 - 2009** NATIONAL TECHNICAL UNIVERSITY OF ATHENS  
School of Applied Mathematical and Physical Sciences  
Major in: Mathematics for Statistics and Computer
- 1998 - 2001** 2<sup>nd</sup> GENERAL HIGH SCHOOL OF AGIA PARASKEVI  
Diploma Degree

## B. PROFESSIONAL EXPERIENCE

- 2008-2011** Private tutor in Mathematics and Computer Science for high school students.
- 2011-2013** Tutor in Mathematics and Computer Science at the center Technokids-Technoplus Agia Paraskevi.
- 2013-2015** Researcher at the Research project THALES: Algebraic modeling of topological and computational structures (Research Project Coordinator: Prof Lambropoulou Sofia N.T.U.A). Member of the organizing committee of a 3-day workshop dedicated to the dissemination of the deliverables of the project. Participation in project's management and coordination.
- 2014-2015** Researcher at the Research project Open Academic Courses N.T.U.A. (Research Project Coordinator: Prof Kokkolakis Georgios N.T.U.A). Participation in project's deliverables writing.  
Researcher at the Research project Hellenic Academic Ebooks (Research Project Coordinator: Prof Koletsos Georgios N.T.U.A).
- 2016** Data analyst at ForthCRS SA (data analysis of the Ferry routes site [openseas.gr](http://openseas.gr)).
- 2017** Researcher at University of the Aegean - Information Management Lab at UAegean - atlantis-group.

## C. OTHER SKILLS

### Specification Languages:

CafeOBJ, Maude, Athena

## Ksystra Katerina (Ξύστρα Κατερίνα)



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[katerinaksysyra@gmail.com](mailto:katerinaksysyra@gmail.com)

### Personal Data:

Year of Birth: 1983  
Citizenship: Greek

**Programming Languages:**

HTML, Java

**Operational Systems:**

Windows XP – Vista – 7 – 10

**Desk Applications:**

Microsoft Office (Word, PowerPoint, Excel, Publisher), Latex

**Drawing Applications:**

Adobe Photoshop, GIMP

**Database Applications:**

Access, SQL (Basic Knowledge of SQL Server 2014 Management Studio and Visual Studio 2015 tools)

**Statistical Applications:**

R, Minitab, Matlab (Basic Knowledge)

**Research project management:**

Experience in Research project's preparation, writing, management and coordination.

**D. SELECTED PUBLICATIONS**

K. Ksystra, N. Triantafyllou, K. Barlas, P. Stefaneas: An Algebraic Specification of Social Networks. SQM 2012: Software quality management, British Computing Society.

Ksystra, K., Triantafyllou, N., Stefaneas, P.: On the Algebraic Semantics of Reactive Rules. 6th International Symposium, RuleML 2012, Springer, (2012) 136--150

Ksystra, K., Stefaneas, P., Frangos, P.: An Algebraic Framework for Modeling of Reactive Rule-Based Intelligent Agents. SOFSEM: Theory and Practice of Computer Science - 40th International Conference on Current Trends in Theory and Practice of Computer Science, LNCS, 407-418 (2014).

Ksystra, K., Triantafyllou, N., Stefaneas, P.: On Verifying Reactive Rules Using Rewriting Logic. RuleML 2014: 67-81

Stefaneas, P., Ouranos, I., Triantafyllou, N., Ksystra, K.: Some Engineering Applications of the OTS/CafeOBJ Method. Specification, Algebra, and Software 2014: 541-559

K. Ksystra, P. Stefaneas, P. Frangos: An algebraic framework for the verification of context-aware adaptive systems. *International Journal of Software Engineering and Knowledge Engineering* 25(7): 1105-1128 (2015)

Ksystra, K., Stefaneas, P.: Formal Analysis and Verification Support for Reactive rule-based Web Agents. *International Journal of Web Information Systems*, Vol 12 Issue 4.

Ksystra, K., Triantafyllou, N., Stefaneas, P.: Combining Algebraic Specifications with First-Order Logic via Athena", Algebraic Modeling of Topological and Computational Structures and Applications, THALES, Athens, Greece, July 1-3, 2015, Editors: Lambropoulou, S., Theodorou, D., Stefaneas, P., Kauffman, L.H. (Eds.).

**E. DISTINCTIONS****Best Ph.D students paper**

K. Ksystra, N. Triantafyllou, K. Barlas and P. Stefaneas, "An Algebraic Specification of

Social Networks”, Proceedings Software Quality Management Conference XX, Editors: E. Berki, J. Valtanen, P. Nykanen, M. Ross, G. Staples, K. Systs, British Computer Society Quality SG SQM/INSPIRE Conference, Tampere, Finland pp. 135-146, 2012.

### **2nd prize**

Hackathon in Open data and passenger transport in the Aegean "Blue hackathon/school open source EL/LAK in shipping - transportation - tourism", Organizers: University of the Aegean & EL/LAK (team: island hopping

## **F. SPOKEN LANGUAGES**

### **English**

Level: Very Good

Diploma: First Certificate in English, University of Cambridge

### **French**

Level: Basic

Diploma: DELF 1

### **Greek**

Native Language

## **G. PERSONAL SKILLS**

Capacity and hard work

Ability to meet deadlines

Team work

Communication skills

## **H. OTHER INTERESTS**

Books, Cinema, Travel

Additional Information: References available upon request