

# NIKOS KATZOURIS

## Curriculum Vitae

### Contact

*National Center for Scientific Research (NCSR) “Demokritos”*  
Institute of Informatics & Telecommunications  
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GitHub: <https://github.com/nkatzz>

### Education

Phd, Machine Learning 2011 – 2017

*Thesis title:* Scalable Relational Learning for Event Recognition.

Dept. of Informatics and & Telecommunications, National University of Athens &

Institute of Informatics and & Telecommunications, NCSR “Demokritos”.

MSc, Mathematical Logic and the theory of Algorithms and Computation 2004 – 2007

National University of Athens & National Technical University of Athens.

BSc, Mathematics 1999 – 2004

Aristotle University of Thessaloniki.

### Work Experience

NCSR “Demokritos” (2010 – present time)

I have worked as a research associate in the following FP7 and H2020 projects:

*DATAcron - Big Data Analytics for Time Critical Mobility Forecasting.*

(<http://speedd-project.eu/>). I worked in the development of machine learning methods for real-time detection of mobility patterns for maritime and aviation applications.

*SPEEDD - Scalable Proactive Event-Driven Decision-making* (<http://speedd-project.eu/>).

I worked in the development of machine learning methods for credit card fraud detection.

*REVEAL - Revealing Hidden Concepts in Social Media* (<http://revealproject.eu/>). I worked in the development of machine learning methods for extracting temporal relational structure from social networks.

*AMINESS - Analysis of Marine Information For Environmentally Safe Shipping* (<http://aminess.eu/>).

I worked in the development of efficient complex event recognition tools for maritime surveillance.

*USEFIL – Unobstrusive Smart Enviroments For Independent Living* (<http://www.usefil.eu/>). I worked in the design and development of complex event recognition under uncertainty for assisted living applications.

*PRONTO – Event Recognition for Intelligent Resource Management* (<http://www.ict-pronto.org/>).

I worked in the development of machine learning tools for activity recognition and transportation management.

Plaisio computers (2008 – 2010)

Java developer, development of web applications with Java/JSP.

## Languages

English (Michigan Proficiency)

## Technical skills

### Programming

**Proficient:** Scala, Python, Java, Logic Programming (Prolog, Answer Set Programming), Linux shell scripting.

**Intermediate:** Apache Spark, Apache Flink, C++, Haskell, Clojure.

### Development tools

**Proficient:** IntelliJ, PyCharm, Eclipse.

### Data bases

**Proficient:** MySQL, NoSQL (MongoDB).

### Software packages

**Intermediate:** Matlab, Octave. I have used several machine learning libraries in Scala (Smile), python (SciKit-Learn) and Spark (Spark-ML)

## Scientific publications

### Journal Publications:

Katzouris N., Artikis A., Paliouras G.: *Online Learning of Event Definitions*, Theory and Practice of Logic Programming (TPLP), 16(5-6):817–833, 2016.

Katzouris N., Artikis A., Paliouras G. *Incremental Learning of Event Definitions with Inductive Logic Programming*. Machine Learning Journal 100(2-3): 555-585.

### Refereed Conference publications:

Artikis A., Katzouris N., Correia I., Baber C., Morar N., Skarbovsky I., Fournier F., Paliouras G.: *A Prototype for Credit Card Fraud Management: Industry Paper*. 11th ACM International Conference on Distributed and Event-Based Systems (DEBS 2017).

Billis A., Katzouris N., Artikis A., Bamidis P.: *Clinical Decision Support for Active and Healthy Ageing: An Intelligent Monitoring Approach of Daily Living Activities*. 17th Portuguese Conference on Artificial Intelligence (EPIA 2015).

Patroumbas K., Artikis A., Kazouris N., Vodas M., Theodoridis Y. and Pelekis N. *Event Recognition for Maritime Surveillance*. 18th International Conference on Extending Database Technology (EDBT 2015).

Katzouris N., Artikis A. and Paliouras G.: *Event Recognition for Unobtrusive Assisted Living*. 8th Hellenic Conference on Artificial Intelligence (SETN), 2014.

### Workshops:

Katzouris N., Artikis A., Paliouras G.: *Distributed Online Learning of Event Definitions*, to be presented at the 27th International Conference on Inductive Logic Programming (ILP 2017).

Katzouris N., Artikis A. and Paliouras G.: *Semi-Supervised Learning of Event Calculus Theories*. Proceedings of the Doctoral Consortium of the European Conference in Machine Learning (ECML) 2015.