

# Ioannis Partalas

RESEARCHER IN DATA SCIENCE

4 avenue du Doyen Louis Weil, 38000 Grenoble, France

✉ | [ioannis.partalas@gmail.com](mailto:ioannis.partalas@gmail.com) | [www.ipartalas.fr](http://www.ipartalas.fr) | [ioannispartalas](https://www.linkedin.com/in/ioannispartalas) | [ioannis-partalas-827a3aa](https://www.youtube.com/channel/UC827a3aa)

## Working Experience

---

### Viseo group, R&D departement

Grenoble, France

RESEARCHER IN DATA SCIENCE

Oct. 2014 - now

- *Large scale machine learning systems*, Viseo Smart Data project (VSD). Conception and development of scalable linear classification systems for high-dimensional problems (for example text classification). Technologies and tools: Python, Spark
- *Machine learning (ML) for Natural Language Processing tasks*, SMILK ANR project. Proposed and developed ML models (CRF and Learning-to-Search) for solving NLP tasks. Technologies and tools: CRF++ and Vowpal Wabbit.
- *Predictive modeling and anomaly/outlier detection*, VSD project, client: Wyres SAS (indoor location technologies). We proposed and developed statistical learning models for anomaly detection from sensor data. Technologies and tools: Python, Apache Storm
- *Influence detection in social networks*, SOMA project (Eurostars). I lead a team of engineers and researchers for the conception and development of influence detection systems in social networks. Technologies and tools: Weka, symbolic linguistic analysis, Elastic Search, Apache Storm.
- Supervision
  - Moufida Adjout (Phd student), *Distributed Ensemble Methods in the MapReduce Framework*, 2014-2016.
  - Simon Moura (Internship - 2nd year of master), *Sparsification for Large-Scale Classification*, 2015.

### Université Joseph Fourier, Laboratoire d'Informatique de Grenoble, AMA team

Grenoble, France

POST-DOC RESEARCHER

Oct. 2011 - Sept. 2014

- Worked in the ANR project Class-Y and in the BioASQ FP7 project on the development of Large Scale Hierarchical Classification systems. I worked mainly with textual data such as bio-medical articles. I co-organized the [Large Scale Hierarchical Text Classification Challenge](#).

### Delphis group

Thessaloniki, Greece

FREELANCE SOFTWARE DEVELOPER

July 2011 - Sept. 2011

- Conception and development of predictive models for real-time event recognition. Technologies and tools: Java and PostgreSQL.

### Department of Engineering Informatics and Telecommunications, University of Western Macedonia

Kozani, Greece

ADJUNCT LECTURER

Oct 2010 - Mar 2011

- Winter Semester 2010-2011, Course: Neural Networks.

## Skills

---

**Machine Learning libraries** Python data stack (Pandas, Numpy, Scikit-learn), Weka, Vowpal Wabbit, XGboost

**NLP tools** nltk, word2vec, CRF++

**Distributed computing** Apache Spark, Gnu parallel

**Visualization** Plotly, Matplotlib, Gnuplot

**Information retrieval libraries** Terrier, Elastic Search

**Programming languages** Python, C/C++, Java, Bash

**Operating systems** Linux, Unix, Windows

**Version control systems** Git, Apache subversion

**Languages** English (excellent), French (excellent), Greek (mother-tongue)

## Education

---

### Aristotle University of Thessaloniki

Thessaloniki, Greece

PHD IN INFORMATICS

2009

Machine Learning

### Aristotle University of Thessaloniki, Greece

Thessaloniki, Greece

MSC IN INFORMATION SYSTEMS

2006

## Professional Activities

---

### INVITED SEMINARS AND TALKS

- IBD4Health Summer School, Archamps, *Machine Learning and Data Science for Health: A case study on obesity*, July 3 2016 (to come)
- AMA team, University of Grenoble Alpes, Title: *Do you like shopping? Product classification for e-Commerce*, 2016
- Grenoble Meetup Data Science group, Title: *Product classification for e-Commerce platforms*, January 27, 2016
- Laboratory Hubert Curien, University of Saint-Etienne Jean Monnet, Title: *Adaptive Learning Methods*, 2014
- ERIC Laboratoire (Université de Lyon). Invited seminar. Title: *Ensemble Pruning*, 2012

### DATA SCIENCE COMPETITIONS

- Regularly I participate in data science competitions, my Kaggle profile: <https://www.kaggle.com/ioannispatalas>.
- Recently, I was ranked 10/175 teams in the Cdiscount competition about e-Commerce item categorization (slides in SlideShare).

## Distinctions

---

- |      |  |                         |
|------|--|-------------------------|
| 2008 | <b>3rd place</b> , Innovative Business Plan Award at the competition "Innovative Ideas in Central Macedonia 2008" organized by Thessaloniki Technology Park Management & Development Corporation S.A in the framework of the Regional Innovation Pole of Central Macedonia Project | Thessaloniki,<br>Greece |
| 1998 | <b>2nd place</b> , Scholarship from the Greek Foundation of State Scholarships for my entrance with the 2nd best score in the Department of Engineering of the Technological and Educational Institute of Kozani   | Kozani, Greece          |

## Publications

---

I have published over 40 scientific papers in major conferences and journals. For a complete list: <http://ipatalas.fr/publications.php> or <http://dblp.uni-trier.de/pers/hd/p/Partalas:Ioannis>

### SELECTED PUBLICATIONS

- *Learning Taxonomy Adaptation in Large-scale Classification*, Journal of Machine Learning Research (to appear), 2016
- *Efficient Model Selection for Regularized Classification by Exploiting Unlabeled Data*, IDA 2015
- *Re-ranking Approach to Classification in Large-scale Power-law Distributed Category Systems*, SIGIR, 2014
- *On Flat versus Hierarchical Classification in Large-Scale Taxonomies*, NIPS, 2013
- *An ensemble uncertainty aware measure for directed hill climbing ensemble pruning*, Machine Learning, 2010

## Interests

---

- Greek traditional dances and music. Dance teacher in the association "Orphée" of Grenoble.
- Running, playing soccer and basketball
- Reading books (literature, science fiction, popularized science, social issues, finance, politics)
- Traveling
- Management board member of the cultural association "Orphée" of Grenoble (2014-now)