

Ioannis Partalas

MACHINE LEARNING SCIENTIST

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Working Experience

Expedia

Geneva, Switzerland

MACHINE LEARNING SCIENTIST

Feb. 2017 - now

I contribute to several projects developing predictive analytics models using Machine Learning and Deep Learning techniques. My recent efforts include development of predictive models for Revenue Management and automated moderation of user generated content.

Viseo group, R&D departement

Grenoble, France

RESEARCHER IN DATA SCIENCE

Oct. 2014 - Feb. 2017

- *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. 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), Tensorflow, Vowpal Wabbit, XGboost

NLP tools nltk, word2vec, CRF++, GloVe

Distributed computing Apache Spark, Gnu parallel

Visualization Plotly, Matplotlib, Gnuplot

Information retrieval libraries Terrier, Elastic Search

Programming languages Python, Scala, 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

PHD IN INFORMATICS

Machine Learning

Thessaloniki, Greece

2009

Aristotle University of Thessaloniki, Greece

MSC IN INFORMATION SYSTEMS

Thessaloniki, Greece

2006

Professional Activities

INVITED SEMINARS AND TALKS

- AMA team, University of Grenoble Alpes, *Learning to Search for NER in the Travel Domain*, March, 2018
- IBD4Health Summer School, Archamps, *Machine Learning and Data Science for Health: A case study on obesity*, July 3 2016
- 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/ioannispartalas>.
- Ranked 2nd at the WNUT Named-Entity Recognition task: <http://noisy-text.github.io/2016/#tasks>
- Ranked 10/175 teams in the Cdiscount competition about e-Commerce item categorization (slides in SlideShare).

Distinctions

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| 2008 | 3rd place , 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, Greece |
| 1998 | 2nd place , 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://ipartalas.fr/publications.php> or <http://dblp.uni-trier.de/pers/hd/p/Partalas:Ioannis>

SELECTED PUBLICATIONS

- *Aggressive Sampling for Multi-class to Binary Reduction with Applications to Text Classification*, NIPS, 2017
- *Learning Taxonomy Adaptation in Large-scale Classification*, Journal of Machine Learning Research, 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)