

Ioannis Koutoulakis | CV

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🌐 <https://www.linkedin.com/ioannis-koutoulakis>

<https://koutoulakis.github.io/>

Work Experience

Software Developer

Telsis, Fareham, UK,

October 2017–Present

An engineering position with focus on voip telephony solutions and web development. Some of the responsibilities I have are revolving around designing, implementing, testing and maintaining microservices in distributed systems that communicate via a REST interface. Development is in Java and Typescript (with Nodejs) for the backend and angularjs for the frontend. The database used is MySQL and deployment is on RHEL7.

Software Engineering Internship

Codly, Cairo, Egypt,

June–July 2015

Internship along with a worldwide non-profit organization called AIESEC, in a start up company in Cairo, Egypt for two months, focusing on android and web application development. Development was in Java for the android and web backend and angular for the frontend.

Research Assistance

University of Athens, Greece,

October–March 2015

I had the honour to join a university team under mister Katakis' guidance, to help, as part of my thesis, implement the algorithm described in the paper : Mining Opinion Words and Opinion Targets in a Two-Stage Framework Liheng Xu, Kang Liu, Siwei Lai, Yubo Chen and Jun Zhao, published in ACL13 conference, in order to evaluate the proposed domain specific polarity lexicon to the one created by Pantelis Agathangelou, Ioannis Katakis, Fotios Kokkoras, Konstantinos Ntonas in the paper : Mining Domain-Specific Dictionaries of Opinion Words, published at WISE 2014 conference. (<http://deixto.com/niosto/>)

Education

Msc in Advanced Computing

Data Mining, Machine Learning and High Performance Computing,

2016–2017

University of Bristol, UK

GPA – 2.1

Bsc in Informatics and Telecommunications

University of Athens, Greece,

2009–2014

Focus on applied Informatics, GPA – 7.28/10

Programming Languages, Frameworks & Tools

Advanced: Java, MySQL, C/C++

Intermediate: Docker, TypeScript, Elasticsearch, Maven, Ant, Nodejs, Git, Mercurial, JavaScript, Html, CSS, JSP, MySQL, Python, Google Maps Javascript api version 3, MVC Spring, L^AT_EX, Agile Methodologies, Jira, OpenMP, MPI, CUDA, Voicexml, Matlab/Octave, Opencv, OpenGL, Weka, Scikit-Learn, Tensorflow

Basic: Bash Scripting

Publications

Learning Patterns for Discovering Domain Oriented Opinion Words, Pantelis Agathangelou, Ioannis Katakis, Ioannis Koutoulakis, Fotios Kokkoras, Dimitrios Gunopulos, KAIS 2017

Projects, Coursework & Github Contributions

Data Mining, Machine Learning & Artificial Intelligence

- o Deep learning technique applied on activity recognition problems from famous AR datasets using tensorflow. Models trained: Deep feedforward Neural Networks (NNs), Convolutional NNs, Recurrent NNs - specifically Long Short Term Memory NNs (LSTMs). Code was written in python and is on a 12-starred public github repository (<https://github.com/Koutoulakis/Deep-Learning-for-Human-Activity-Recognition>).
- o Sentiment analysis in Twitter posts - Tests using various clustering / classification algorithms (Using Java, and a machine learning tool called Weka)
- o LCSS algorithm implementation in taxi routes in China - Visualization in Google Maps (Using Java)
- o A.I. implementation of finding a labyrinth's exit using A star algorithm from google code repository with three different heuristics in python

Parallel Programming

- o Jon Conway's Game of Life: Implementation and experiments (using MPI, OpenMP, CUDA)
- o Serial and Parallel optimization of Lattice-Boltzman Method for fluid simulation in 2D (using MPI, OpenMP, OpenGL)

Miscellaneous

- o Algorithms in Data Structures (Project: Reverse search engine implementation - SIGMOD 2013 (simplified) using C)
- o Operating Systems - System Programming (Various Projects: Server client implementation with epoll, bash scripting, creating and synchronizing multiple processes using mutexes etc. implemented in C)
- o Object Oriented Programming (Project: Rpg like game in C++ with no graphic environment (using basic inheritance logic, overloading functions etc)
- o Phone calculator using voicexml (uploaded and tested on voxeo)

Activities & Events

20/09/2018: Getting Started with Google Kubernetes Engine (certification available on linkedin)

10/05/2015: Completed online coursera course for Programming Mobile Applications for Android Handheld Systems: Part 1 (certification available on linkedin)

12/09/2014: Completed Stanford university online coursera course for Machine Learning

Languages

Greek Native, **English** Proficient level, **French** Intermediate level (B1)