Georgios Samaras

Contact Information

Georgios Samaras
Tainarou 76 Street
Glyfada, Greece, 16561

E-mail: gsamaras@di.uoa.gr
Phone: (+30) 6978849807
Website: G.Samaras (242K views)

Education

Department of Informatics & Telecommunications (DIT) Sep 2015 – Feb. 2017
National & Kapodistrian University of Athens, Greece
Master student, Data Science - current location.

Faculty of Informatics (USI) Sep 2012 – Feb. 2013
Universitá della Svizzera italiana, Lugano, Switzerland
Transfer student, under Erasmus program. Semester rank: *2nd* (GPA *8.85* /10).

Department of Informatics & Telecommunications (DIT) Sep. 2010 – Feb 2015
Undergrad. student of a 4 year course. Top-annual Thesis. Degree rank: *1st* (GPA *8.85* /10).

4th High School of Glyfada, Athens, Greece Sep. 2007 – June 2010
GPA *19.1* /20 and 7 Aristeions for distinctions related to courses.

Fellowships

- Full financial support in Winter school "Combinatorial and algorithmic aspects of convexity", with professors Vempala and Bárány, which took place in IHP, Paris.
- Full financial support to participate in Mediterranean Days@Campus SophiaTech, France.
- Fellowship from European Union, for studying in Switzerland for 1 semester.

Work experience

Software Developer Engineer Intern at Yahoo! Inc., Silicon Valley, USA.	*7*-9/2016
IT support and supervisor of lecture rooms, for DIT, Greece.	*2*-5/2016
Teaching Assistant in 'Software Development', at DIT, Greece.	*2*015-16
Software Developer Engineer in European project CloudFlow, European Union.	*3*-9/2015
Software Developer Engineer Intern at INRIA, in GUDHI project, France.	*4*-8/2014
Waiter at Piatsa Kalamaki, Athens.	*6*-8/2011
Goalkeeper at Terpsithea FC, in Delta Ethniki, Athens.	*2*006-07

Technical Skills

Algorithms | Bigdata | Computational-Geometry | Distributed-Computing | Machine-Learning | Parallel-Processing | C++ | C | Python | Scala | Java | Prolog | Matlab | Scripting | Assembly | $HTML_5$ | CSS_3 | AJAX | JavaScript | RDF | NODE.js | PHP | Dynamic | Event driven | Logic | Multi | Object-Oriented | Procedural | Hadoop | Spark | SciKit | ScaLAPACK | Intel-MKL | HDF | Git | MPI | CGAL | Boost | LaTeX | jQuery | MongoDB | SQL | SPARQL | PostgreSQL

Languages

C2 | B1 | A1 | Native

(selected) Projects

Practical Linear-Space A. Near Neighbors in High Dimension (Master Thesis) *w*inter 16
Algorithms, Hashing, Parallel processing, and the Near Neighbor problem in High Dimensions.

Virtual Reality Serious Game: $HTML_5$, Unity, $Construct_2$(team project) *w*inter 16
User Experience Quality Assurance. "Feed the Polar Bear", an educative and fun game.

Big Data Visualization: Spark, Python, $HTML_5$, CSS_3, JS (Yahoo project) *s*ummer 16
k-means exps., visualize clusters, two implementations, eval. user experience. Improved Spark.

Big Data Visual Similarity Search: Spark, Python, SciKit-Learn (Yahoo project) *s*u. 16
Collect & clean data, deep-learning features, apply PCA, query. Classification with SVM.

Big Data Similarity Search with text data: Python (team project) *s*pring 16
Memory limitations/smart design. Minhashing (dim. reduction) & LSH (ANNS) in high dim.

Publishing & querying Linked geospatial data: OWL, RDF, GeoSPARQL *w*inter 15
Create ontologies, convert/combine datasets & pose interesting queries about Greek waters.

Big Data Mining: Spark, Hadoop, Python, Scala, SciKit-Learn (team project) *w*int. 15
Cluster creation. Collect, process/clean, *clustering* and evaluation of text data.

Distributed/hybrid computing: MPI, OpenMP, CUDA, C (team project) *w*inter 15
Heat transferring simulation. Clever design to skip Scatter step, unique approach in class.

Football apps: Real-life problem, HTML$_5$, CSS$_3$, PHP, JavaScript, SQL (iCage 80k) *1*3-5
Maintenance, user-based upgrades. Scheduler, Suggestions, Standings, Stats. Acquired/Inspired.

Cloud Linear Algebra: ScaLAPACK, Intel-MKL, MPI, C++ (European project) *s*pr. 15
Cluster creation. Leverage Memory. Numeric precision research. CloudFlow with Helic, Inc.

High-dimensional approximate NN: kd-GeRaF: C++ (thesis project, GitHub, WebApp) *w* 14
It handles 10^6 images in 960 dimensions in < 1 sec with about 90% accuracy. **Molecule folder: Bioinformatics, C++** *s*ummer 14
Generate new realistic and accurate data. Later use by the professor of the "Software Dev".

Social Network Analysis System (SIGMOD contest): C++ *s*pring 14
Analyze a large social network, with real datasets. Efficiently perform queries in parallel.

Program a robot: C, cross-compiling *w*inter 12
Project that was supervised by Dr. Alexander Förster. Demo.

Impress.js WYSIWYG editor: HTML$_5$, CSS$_3$, Impress.js, jQuery, Aloha winter 12
Edit presentations on the fly in the browser. 4-person project, presentation, and code Google.

Photoalbum: HTML$_5$, CSS$_3$, MongoDB, JS, jQuery, NODE.js, JSON, AJAX *w*inter 12
Client/server side, various features (slideshow, tag cloud, Drag & Drop, efficient search, etc.).

Reversi (aka Othello): C *w*inter 2010
A console implementation of reversi using the Minimax algorithm to determine moves.

Achievements

- Connected FAGE and Yahoo for food supplies.
- Career opportunities by *Electronic Arts: EA Games* and *Obrela, Security Industries*.
- Exps for "Rand Methods Poly Vol" paper.
- Top *Google* result for Quicksort C++.
- Found *bugs in Facebook*, proposed fixes (were debugged). *A job offer* was made to me.
- Created slides and exercises in "Electromagnetism & Optics" course, as an undegrad.
- Accepted for a CS Master at EPFL.
- Called in for a *Google* interview on 2017.
- *Captain* of football team, 18 medals, 3 cups, Top Scorer Award. 3 Honours from the state.
- Undergrad *EρΓA* lab & Master *study group*.
- Selected in DIT team for *SIGMOD*.
- Coordinated 40 people & planned rescue with Fire dept. of an injured & trapped child.
- Top voted Student *President*, found resources on funding absence. Pioneered in Recycling.
- Achieved a 30% off for housing in USA.

Why me?

5 + 1 reasons

- Team spirit (communicator, sociable, smile) - able to lead
- Missionary member
- Imagination
- Resilient & reliable (recovered twice when PC failed)
- Able to learn state-of-the-art technologies
- I love what I am doing (CS and the mindset)

Publications

- Y. Avrithis, I. Emiris and G. Samaras, "High-dimensional visual similarity search: k-d Generalized Randomized Forests", *Computer Graphics International*, July 2016.
- G. Avarikioti, I. Emiris, I. Psarros and G. Samaras, "Practical linear-space Approximate Near Neighbors in high dimension", *The European Workshop on Computational Geometry*, April 2017.

Hobbies

Investments, airplanes, organizing amateur football leagues, Trusted user in Stack Overflow (20k rep.), Pokemon World Tournament (top 15), coding, dancing, traveling and more ...