

Stefanos Georgiou

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About me: I am passionate with **coding**, empirical studies, integrating new technologies, and automating cumbersome tasks. I enjoy working on the command-line and especially with Linux systems. I love to create small, independent components and tools to facilitate different daily functionalities. On my free time, I enjoy sporting, reading books, and **travelling**.

Education

- 2021-current** **PostDoctoral, Electrical and Computer Engineering;** Queen's University
Lab name: Software Evolution and Analytics Lab
Lab's head: **Prof. Ying (Jenny) Zou**
- 2016-2021** **PhD, Computer Science;** Athens University of Economics and Business
Thesis title: *Energy and Run-Time Performance Practices in Software Engineering*; **Thesis**
PhD advisors: **Prof. Diomidis Spinellis** and **Prof. Panos Louridas**
- 2013-2015** **MSc, Pervasive Computing and Communications for Sustainable Development (PERCCOM);** Erasmus Mundus Joint Master Degree
ITMO University of Saint-Petersburg (Russia) Thesis title: *Implementating Green IT Approach for Transferring Big Data over Parallel Data Links*; **Thesis**
Lulea University of Technology (Sweden) Semester 3: *Resource Efficient Pervasive Computing Systems and Communications* **Degree**
Lappeenranta University of Technology (Finland) Semester 2: *Smart Software and Services* **Degree**
University of Lorraine (France) Semester 1: *Sustainable Computer Network Engineering* **Degree**
- 2008-2013** **BSc, Networks and Systems Programming;** University of Cyprus
Thesis title: *Implementation and Evaluation of the Biologically – Inspired AnthoC-Net Routing Protocol in Sensor Network*; **Degree**

Industrial Experience

Sep 2020-current Software Developer **Greek Free, Open Source Software**

Developing a privacy-preserving epidemic dosimeter based on contact tracing.

Proof Repository

Responsibilities

Developing **Python**, **Shell**, and **Ansible** scripts on a Raspberry Pi Zero

Extented testing for the correct functionality of the device

Jan 2019-Apr 2020

Back-end developer, DevOps, and Integrations: AllCanCode Inc. Greek Branch

Supported the product development that facilitates fast web-sites development (by using **Blockly**) on Desktop that can be exported in smart-phones as well.

Responsibilities

Development of API end-points in JavaScript (**Node.JS**) and **MongoDB** for the server platform (product) and customer products

Creation of the CI system for the product (in GitLab) to perform back-end and front-end testing (through **Mocha** and **Cypress** frameworks, respectively) and CD to auto-deploy product (for specific push branches) on Google's App Engine (Aurora, Beta, and Production) using the **Flex environment**

Migration of monolithic product to micro-services using **Firebase hosting**, **Cloud Functions**, and **Cloud Run**

Integration of **Bitrise** system in the product to allow platform users in exporting their Desktop applications to Android and iOS smart-phones through the **Cordova** wrapper

Jan 2016-2019

Proposals writing: Singular Logic S.A.

Proposals writing for the European Projects Department. **Proof**

Responsibilities

Writing research proposals for Horizon 2020

Technical Experience

Back-End

BASH (Often automating cumbersome and time consuming tasks)

NodeJS (Fan of KOA, prefer Mocha-Chai, like to use Native Addons for performance)

Java (Was also teaching it at the Athens University of Economics and Business)

Python (No need to read tutorials, feeling confy to code anytime)

C (First language to learn and impressed by its performance)

C++ (Second to learn, but as soon as I learned Java I stopped using it)

MongoDB (**Basics**, **Aggregations**, **JavaScript**, and **Performance**)

DevOps

Continuous Integration and Deployment (Big fan of CI/CD Travis, GitLab, and Actions)

Code Quality (Coveralls, maven-plugins, Style-Checkers, Reports, and pre-commit hooks)

Hosting (Firbase, Docker, and Google App Engine)

Mobile CI/CD (Bitrise with Cordova wrapper for mobile apps)

Configuration Management (Ansible because it uses YAML)

Projects Epidose: A privacy-preserving epidemic dosimeter based on contact tracing **Repository**

Exam Questionnaire Scanner: **Repository**

Measuring Energy Consumption: **Software** and **Hardware** tools

Programming II website: **Repository**

Rosetta Code Experiment: **Repository**

Validate Links: **Repository**

Certificates Unix Tools: **Data, Software, and Production Engineering**

Course Completion MongoDB: **Basics, Aggregation, JavaScript, Performance**

Loading the data just for you.

Research Publications

- Conference Papers
 - **Stefanos Georgiou**, Maria Kechagia Panos Louridas, and Diomidis Spinellis. What Are Your Programming Language's Energy-Delay Implications? In 15th International Conference on Mining Software Repositories: Technical Track, MSR '18. New York, NY, USA, May 2018. Association for Computing Machinery. **[Paper]** **[BibTex]** **[Presentation]** **[Data-set]**
 - **Stefanos Georgiou**, Maria Kechagia, and Diomidis Spinellis. Analyzing Programming Languages' Energy Consumption: An Empirical Study. In PCI 2017: Proceedings of the 21st Pan-Hellenic Conference on Informatics, ACM International Conference Proceeding Series. ACM Press, September 2017. **[Paper]** **[BibTex]** **[Presentation]** **[Data-Set]**
- Journal Articles
 - **Stefanos Georgiou**, Dimitris Mitropoulos, and Diomidis Spinellis. Energy-Efficient Computing in a Secure Environment. Submitted in July 2020 for review in ACM Transaction of Computer Systems.
 - **Stefanos Georgiou** and Diomidis Spinellis. Energy-Delay Investigation of Remote Inter-Process Communication Technologies. Accepted for publication in Elsevier Journal of Systems and Software 2019. **[Preprint]** **[BibTex]**
 - **Stefanos Georgiou**, Stamatia Rizou, and Diomidis Spinellis. Software Development Life Cycle for Energy-Efficiency: Techniques and Tools. Accepted for publication in ACM Computing Surveys 2019. **[Preprint]** **[BibTex]**

Invited Talks

Tutorials *How to improve your CI/CD process* presented on 5th of July 2019 at BALab of Athens University of Economics and Business in Athens, Greece. **Presentation**

Travis CI with CV template tutorial presented on 7th of June 2018 at ITMO University of Saint Petersburg for PERCCOM Master students in Saint-Petersburg, Russia. **Presentation**

Research *What are your programming language's energy-delay implications?* presented on 12th of June 2018 at PERCCOM's Summer School in Lappeenranta, Finland.
Proof

Teaching Experience

Assisting my PhD advisor at Programming II course (Winter Semester of 2016, 2017, and 2018) by giving tutorial and Lab sessions in Java [**Repository**]

Gave Java lectures and tutorials for the 1st and 2nd Coding Boot Camp in Athens, Greece (Oct. 2017 - May 2018) [**Repository**] [**Proof**]

Organization Services

Program Committee International Workshop on Sustainable Software Engineering

Reviewer Journals submitted to Software: Practices and Experience

Co-reviewer Conference papers submitted to ICSE-SEIP, MSR, OSS, ICPC, ICCS, SANER, FSE, ASE, ICMSE and SATToSE

Grands, Awards, Languages, and Living Abroad

- Grands and awards:
 - Mentored younger researcher **who won 2nd** place in SRC ESEC/FSE '19.
 - Best paper award from the 15th Annual DMST Student Conference (2018)
 - Marie Skłodowska-Curie funds, **SENECA** (2016-2019)
 - Erasmus Mundus Masters Scholarship, PERCCOM (2013-2015)
- Human Languages:
 - Greek/Hungarian (Native speaker)
 - English (Fluent speaker)
 - Russian/France (Basic knowledge)
- Living Abroad:
 - Born in Gyula, Hungary but grown up in Nicosia, Cyprus.
 - Ate baguettes and drunk wine in Lorraine, France (Fall Semester of 2013)
 - Attended to many sauna parties in Lappeenranta, Finland (Spring Semester of 2014)
 - Fish ice-cold beers from lakes in Lulea, Sweden (Fall Semester of 2014)
 - Drunk vodka and ate borsh in Saint-Petersburg, Russia (Spring Semester of 2015)
 - Teaching in Athens and visiting islands in Greece (Fall Semester of 2016 till now)
 - Biked in Delft, the Netherlands for my PhD secondment (Half month of Sept. 2017)

My Academic Tree

Analyzing Repository _____