# Stefanos Georgiou

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**About me**: I am passionated with [coding](https://stefanos1316.github.io/programmers_blog/), empirical studies, integrating new technologies, and automating cumbersome tasks. On my free time, I enjoy sporting, reading books, and [travelling](https://stefanos1316.github.io/my_blog/index.html).

## Education

2016-2020

**PhD, Computer Science**; Athens University of Economics and Business

Thesis title: *Energy and Run-Time Performance Practices in Software Engineering*; [Thesis](phd_thesis.pdf)

PhD advisors: [Prof. Diomidis Spinellis](https://www2.dmst.aueb.gr/dds/) and [Prof. Panos Louridas](https://www.balab.aueb.gr/panos-panagiotis-louridas.html)

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](msc_thesis.pdf)

Lulea University of Technology (Sweden) Semester 3: *Resource Efficient Pervasive Computing Systems and Communications* [Degree](msc_lulea.pdf)

Lappeenranta University of Technology (Finland) Semester 2: *Smart Software and Services* [Degree](msc_lappeenranta.pdf)

Unversity of Lorraine (France) Semester 1: *Sustainable Computer Network Engineering* [Degree](msc_lorraine.pdf)

2008-2013

**BSc, Networks and Systems Programming**; University of Cyprus

Thesis title: *Implementation and Evaluation of the Biologically -- Inspired AntHocNet Routing Protocol in Sensor Network*; [Degree](bsc_cyprus.pdf)

## Industrial Experience

Sep 2020-current

**Software Developer** [Greek Free, Open Source Software](https://gfoss.eu/)

Developing a privacy-preserving epidemic dosimeter based on contact tracing. [Proof](gfoss_2020.pdf) [Repository](https://github.com/eellak/epidose.git)

*Responsibilities*

Developing [Python](https://www.python.org/), [Shell](https://www.gnu.org/software/bash/), and [Ansible](https://www.ansible.com/) 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](https://www.allcancode.com/)

Supported the product development that facilitates fast web-sites development (by using [Blockly](https://developers.google.com/blockly)) on Desktop that can be exported in smart-phones as well.

*Responsibilities*

Development of API end-points in JavaScript ([Node.JS](https://nodejs.org/en/)) and [MongoDB](https://www.mongodb.com/) 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](https://mochajs.org/) and [Cypress](https://www.cypress.io/) 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](https://cloud.google.com/appengine/docs/flexible)

Migration of monolithic product to micro-services using [Firebase hosting](https://firebase.google.com/docs/hosting), [Cloud Functions](https://firebase.google.com/docs/functions), and [Cloud Run](https://cloud.google.com/run)

Integration of [Bitrise](https://www.bitrise.io/) system in the product to allow platform users in exporting their Desktop applications to Android and iOS smart-phones through the [Cordova](https://cordova.apache.org/) wrapper

Jan 2016-2019

**Proposals writing:** [Singular Logic S.A.](https://portal.singularlogic.eu/en)

Proposals writing for the European Projects Department. [Proof](singular_logic_2016-2019.pdf)

*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 (First real love, I was also teaching it at the Athes University of Economics and Business)

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

C (First ever learned, in love with Makefiles, and impressed by its performance)

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

MongoDB ([Basics](mongodb_m001,pdf), [Aggregations](mongodb_m121.pdf), [JavaScript](mongodb_m220.pdf), and [Performance](mongodb_m201.pdf))

*DevOps*

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

Code Quality (Coveralls, maven-plugins, Style-Checkers, Reports. 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](https://github.com/eellak/epidose)

Exam Questionnaire Scanner: [Repository](https://github.com/AntonisGkortzis/ExamQuestionnaireScanner)

Measuring Energy Consumption: [Software](https://github.com/stefanos1316/SEMTs_Comparisson) and [Hardware](https://stefanos1316.github.io/courses/tools/measuring_energy_consumption_direct_approach-p.html#/) tools

Programming II website: [Repository](https://github.com/stefanos1316/courses)

Rosetta Code Experiement: [Repository](https://github.com/stefanos1316/Rosetta_Code_Research_MSR)

Validate Links: [Repository](https://github.com/stefanos1316/validateLinks)

*Certificates*

Unix Tools: [Data, Software, and Production Engineering](unix_tools_edx.pdf)

*Course Completion*

MongoDB: [Basics](mongodb_m001.pdf), [Aggregation](mongodb_m121.pdf), [JavaScript](mongodb_m220.pdf), [Performance](mongodb_m201.pdf)

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](GKLS18.pdf)] [[BibTex](GKLS18.bib)] [[Presentation](https://www.slideshare.net/GeorgiouStefanos/what-are-your-programming-languages-energydelay-implications-106251480)] [[Data-set](https://github.com/stefanos1316/Rosetta_Code_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](GKS17.pdf)] [[BibTex](GKS17.bib)] [[Presentation](https://www.slideshare.net/GeorgiouStefanos/programming-languages-energy-consumption-an-empirical-study)] [[Data-Set](https://github.com/stefanos1316/Rosetta_Code_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](GS19.pdf)] [[BibTex](GS19.bib)]
  + **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](GRS19.pdf)] [[BibTex](GRS19.bib)]

## 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](https://aueb-balab.github.io/courses/tools/ci_cd_with_gitlab-p.html#/)

*Travis CI with CV template tutorial* presented on 7th of June 2018 at ITMO Univesity of Saint Petersburg for PERCCOM Master students in Saint-Petersburg, Russia. [Presentation](https://aueb-balab.github.io/courses/tools/travis_ci_cv_template-p.html#/)

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](perccom_summer_school_2018.pdf)

## 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](https://github.com/AUEB-BALab/courses)]

Gave Java lectures and tutorials for the 1st and 2nd Coding Boot Camp in Athens, Greece (Oct. 2017 - May 2018) [[Repository](https://github.com/codeandwork/courses)] [[Proof](boot_camp_athens_2016_2017.pdf)]

## Organization Services

*Program Committee*

International Workshop on Sustainable Software Engineering

*Reviewer*

Jounals submitted to Software: Practices and Experience

*Co-reviewer*

Conference papers submitted to ICSE-SEIP, MSR, OSS, ICPC, ICCS, SANER, and SATToSE

## Grands, Awards, Languages, and Living Abroad

* Grands and awards:
  + Mentored younger researcher [who won 2nd](fse19.pdf) place in SRC ESEC/FSE '19.
  + Best paper award from the 15th Annual DMST Student Conference (2018)
  + Marie Skłodowska-Curie funds, [SENECA](https://portal.singularlogic.eu/en/eu-project/12374/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 Semeseter 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)

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