Georgios-Petros Drosos

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EDUCATION

Athens University of Economics and Business (AUEB), Athens, Greece

09/2018 - 10/2022

- BSc in Management Science & Technology (4-year degree; 246 ECTS)
 - o Grade: 9.18/10 "Distinction" (graduated 3rd in a class of 145 students)
 - o Concentration: Software and Data Analysis Technologies
 - o Thesis: "Exploring the Statistical Properties of Fine-grained Code Reuse in the PyPI Ecosystem" (9.5/10)

High School of Paros (Grade 19.9/20 "Distinction")

09/2015 - 06/2018

Publications

• Stefanos Chaliasos, Thodoris Sotiropoulos, **Georgios-Petros Drosos**, Charalampos Mitropoulos, Dimitris Mitropoulos, and Diomidis Spinellis. "Well-Typed Programs Can Go Wrong: A Study of Typing-Related Bugs in JVM Compilers". In Proceedings of the ACM on Programming Languages, OOPSLA '21. ACM, October 2021

PROFESSIONAL & RESEARCH EXPERIENCE

Research Assistant, Business Analytics Laboratory (https://www.balab.aueb.gr/), AUEB, Greece 08/2022 - Ongoing

- Investigating the effects of transitivity and specificity on Technical Leverage in the Maven Ecosystem.
- Performed a reachability analysis on static call graphs of 5840 Maven applications along with their direct and transitive dependencies
- Measured the size of the dependency code which is reachable within each application at the fine-grained level

Research Software Engineer, FASTEN Project - Business Analytics Laboratory, AUEB

09/2021 - 08/2022

- Worked on FASTEN (https://www.fasten-project.eu/), a European Horizon 2020 Research Project aiming to develop an intelligent software package management system that will enhance robustness and security in software ecosystems of C, Java and Python applications.
- Maintained AUEB team's software tools, which produce C and Python call graphs using static and dynamic analysis techniques.
- Created and deployed in production two Spring Boot REST-API Services, in order to make FASTEN's Knowledge Base accessible online.
- Successfully presented and defended AUEB's working package at the project's Final Review Meeting with the EU Commission.

Research Assistant, Business Analytics Laboratory, AUEB

01/2021 - 09/2021

- Conducted empirical research on typing-related bugs in compilers of four mainstream JVM languages: Java, Kotlin, Groovy and Scala.
- Manually analysed and categorised 320 fixed bugs in terms of test case characteristics, root causes, symptoms and fix characteristics.
- Research work resulted in publication into Object-Oriented Programming Systems, Languages and Applications Conference (OOPSLA)

TEACHING EXPERIENCE

Teaching Assistant, Course: Programming II, AUEB

09/2022 - Ongoing

- This course covers advanced programming topics in Java such as Compilers, Generic Programming, Functional and Concurrent Programming. The course includes weekly workshops and programming work in Java as well as a group assignment of building a complete Java Application.
- Assisting students in understanding the concept of their assignments and evaluated their individual & team projects.
- Delivering biweekly lectures in Compilers, Finite State Machines, Data Structures and Generic Programming.

Laboratory Assistant, Course: Introduction to Computer Science, AUEB

09/2021-02/2022

• This course introduces students to the basic concepts of Computer Science such as Computer Architecture, Computer Networks, Algorithm Design and Computability. The course includes a mandatory lab in which participants apply in

- practice, in a series of exercises, the material taught in class
- Assisted students in understanding the concept of their assignments and evaluated their work.

INVITED TALKS

- "Exploring the Statistical Properties of Fine-Grained Code Reuse in the PyPI Ecosystem". Invited Thesis Presentation, KTH Royal Institute of Technology Software Research Meetup, Sweden (Remote), December 2022.
- "FASTEN Project: Enabling Intelligent Software Package Management". Invited keynote address, framework: "Leveraging Open Source technologies for better services in the European software ecosystem". Webinar of the European Forum of the Software Research Community, Brussels (Remote), October 2022.

HONOURS & AWARDS

- Research Scholarship: Recipient of the program "Strengthening Research Activity of Business Analytics Laboratory of the department of Management Science and Technology", issued by the Athens University of Economics and Business Research Center, Athens, September 2022.
- **Eurobank Academic Award**: In the framework of Eurobank's Corporate Social Responsibility program: "The Great Moment of Education" earned an award for graduating 1st in my high-school. Athens, 2018.

Volunteering

- **Student Volunteer** at the 29th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), Athens, August 2021.
- Open Source Software Contributor of JabRef, a cross-platform citation and reference management software, Germany (Remote), 02/2021 08/2021.
- IT-Logistics Manager at 17th Management Science and Technology Student Conference, Athens, 08/2019 07/2021.
- **Member of the Promotion Team** at 16th Management Science and Technology Student Conference, Athens, 10/2018 07/2019.

TECHNICAL SKILLS

- Languages: C, Java, Python, SQL, Shell (Bash/Zsh), Matlab
- **Software Tools:** Git, Github Actions, Docker, Kubernetes, Apacke Kafka, Redis, Apache Hadoop, MongoDB, Neo4J, RapidMiner, PowerBI, SPSS Statistics, Flask, Spring Boot, LaTeX

Languages

• English (fluent), German (intermediate), Greek (native)