

Georgios Liargkovas

✉ gliargovas@aub.gr | 🏠 gliargovas.github.io | 💻 gliargovas | 🔗 george-liargovas-796259175 | 📧 Georgios Liargkovas

Education

Columbia University

PhD in Computer Science

Advisor: Prof. [Kostis Kaffes](#)

New York, NY, USA

Sep 2024 - Present

Athens University of Economics and Business (AUEB)

BSc in Management Science & Technology

Athens, Greece

Sep 2018 - Mar 2023

- **Grade:** 9.37/10 (2nd among 120 students – top 1.6%)
- **Major:** Software Engineering and Data Analysis
- **Thesis title:** Scientific Collaboration and Diasporas - The case of Greek and Finnish co-authorship network.

Publications

- **Georgios Liargkovas**, Konstantinos Kallas, Michael Greenberg and Nikos Vasilakis, “Executing Shell Scripts in the Wrong Order, Correctly”, *19th Workshop on Hot Topics in Operating Systems (HotOS XIX)*, Providence, RI, USA, 2023 ([link](#))
- **Georgios Liargkovas**, Angeliki Papadopoulou, Zoe Kotti and Diomidis Spinellis, “Software Engineering Education Knowledge Versus Industrial Needs”, *IEEE Transactions on Education*, 2021 ([link](#))

Research and Work Experience

Brown University

Research Affiliate (Advisor: [Prof. Nikos Vasilakis](#))

Providence, RI, United States

Oct 2022 - Aug 2024

- Created a speculative, out-of-order execution engine of POSIX shell scripts. 📖
- Co-developed [try](#), a lightweight tool that lets users run a command and inspect its effects before changing their live system, via Linux’s namespaces and the Overlayfs union filesystem (4.6k+ Github stars).
- **Technologies & tools used:** Python, Shell scripting (bash/zsh), Docker, System call tracing & isolation, Linux namespaces, OverlayFS

Athens University of Economics and Business, BALab, AUEB

Junior Researcher (Advisor: [Prof. Diomidis Spinellis](#))

Athens, Greece

Mar 2020 - Aug 2024

- Carried out research about the gap between software practitioners’ education and industry demands. 📖
- Examined the use of static analysis warning suppression to detect motives behind their use and impact on software projects.
- Assisted in an empirical study of boilerplate code.

Secure Open Source Software and Hardware Adaptable Framework (SecOPERA)

Research Software Engineer (Advisor: [Prof. Panos Louridas](#))

Athens, Greece

May 2023 - May 2024

- Requirement Specification & Validation and Architectural Design of Secure Open Source Software and Hardware Adaptable Framework (SecOPERA), a hub for open-source solutions funded by an EU Horizon Europe grant. ([link](#))

Ubitech Ltd.

Software Engineering Intern

Athens, Greece

Mar 2022 - Jun 2022

- Implement backend/frontend components of a Content Management Software (CMS) for Heraklion Archaeological Museum.
- Implement front-end components for internal e-commerce project.
- **Technologies & tools used:** Java (Quarkus), Docker, Javascript (React, Vue.js), Figma

Teaching Experience

Athens University of Economics and Business

Programming II (Undergraduate Level, 2nd year, Students: 180)

Athens, Greece

Fall 2023

- **Role:** Teaching Assistant (TA)
- Delivered bi-weekly lectures on Compilers, Data Structures, Functional and Generic Programming in Java.
- Aided students in course assignments during weekly lab support sessions.

Athens University of Economics and Business

Applied Software Engineering (Undergraduate Level, 3rd year, Students: 50)

Athens, Greece

Spring 2022, 2023

- **Role:** Teaching Assistant (TA),
- Assisted in course assignment evaluation, providing feedback on individual students’ assignments.

- **Role:** Lead Teaching Assistant (TA)
- Responsible for overall course organization, lectures, labs, individual assignments, and assessment.
- Lectured on a weekly basis on Computer Architecture, Networks, Algorithms, Data Structures and Databases.
- Fully automated final examination by creating a customizable multiple choice exam generator.

Volunteering Experience & Service

International Conference on Mining Software Repositories '23 (MSR '23)

Lisbon, Portugal

Co-Chair of Web Presence

April 2024

- Responsible for creating and managing the conference's website.

International Conference of Software Engineering '22 (ICSE '22)

Pittsburgh, PA, USA

Student Volunteer

May 2022

- In-person conference support on physical and online conference sessions.

ESEC/FSE '22 Conference

Athens, Greece (Remote)

Student Volunteer

May 2022

- Remote conference support on online sessions.

JabRef

Germany (Remote)

Open-Source Software Contributor

June 2021

- Designed and expanded functionality for file import dialog windows ([link](#))

- **Technologies & tools used:** Java (JDK 15, JavaFX)

ELOI Educational Lab, AUEB

Athens, Greece

Lab Assistant

Sept. 2018 - Feb. 2019

- Responsible for the operation and security of the lab during after hours, twice a week

Honors and Awards

2024 SEAS Doctoral Fellowship, Columbia University

New York, NY, USA

2023 HotOS Student Grant, ACM SIGOPS

Providence, RI, USA

2022 Research Scholarship Award, Athens University of Economics and Business

Athens, Greece

2022 ACM SIGSOFT CAPS Grant, ICSE 2022

Pittsburgh, PA, USA

2022 ACM SIGSOFT Support Grant, Student Mentoring Workshop, ICSE 2022

Pittsburgh, PA, USA

2022 Honorary Award, Athens University of Economics and Business

Athens, Greece

Languages

English Fluent - C2

French Intermediate - B2

Greek Native

Skills

Programming C, HTML/CSS, JSP, JavaScript, MATLAB, Python, SQL, Shell scripting, Java
Miscellaneous Apache Hadoop, Git, Keras, L^AT_EX, MSSQL Server, Microsoft Office (ECDL Core), MySQL, Neo4J, PowerBI, Redis, SPSS, Shell (Bash/Zsh), TensorFlow2