Georgios Liargkovas

Education __

Columbia University

New York, NY, USA

PhD in Computer Science

Advisor: Prof. Kostis KaffesAnticipated graduation: May 2029

Sep 2024 - Present

Athens University of Economics and Business (AUEB)

Athens, Greece

Sep 2018 - Mar 2023

BSc in Management Science & Technology

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

Research and Work Experience

Brown University Providence, RI, United States

Visiting Research Fellow (Advisor: Prof. Nikos Vasilakis)

Oct 2022 - May 2024

- Created hs 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 (5.3k+ 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

Athens, Greece

Junior Researcher (Advisor: Prof. Diomidis Spinellis)

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 its use and impact on software.

Secure Open Source Software and Hardware Adaptable Framework (SecOPERA)

Athens, Greece

Research Software Engineer (Advisor: Prof. Panos Louridas)

May 2023 - May 2024

• Requiremnt Specification & Validation and Architectural Desingn 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. Athens, Greece

Software Engineering Intern

Mar 2022 - Jun 2022

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

Publications

ML for Sys. 25' Georgios Liargkovas, Vahab Jabrayilov, Hubertus Franke and Kostis Kaffes, "An Expert in Residence: LLM Agents for Always-On Operating System Tuning", *To appear at ML for Systems Workshop at NeurIPS 2025*, 2025

PACMI 25'
Georgios Liargkovas, Prabhpreet Singh Sodhi, and Kostis Kaffes, "Set It and Forget It: Zero-Mod ML Magic for Linux Tuning", 4th Workshop on Practical Adoption Challenges of ML for Systems (PACMI '25), 2025

eBPF 25' Prabhpreet Singh Sodhi, **Georgios Liargkovas**, and Kostis Kaffes, "**Empowering machine-learning assisted kernel decisions with eBPFML**", 3rd Workshop on EBPF and Kernel Extensions (eBPF '25), Coimbra, Portugal, 2025 (link)

HotOS 23'

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)

IEEE TE 21, Georgios Liargkovas, Angeliki Papadopoulou, Zoe Kotti and Diomidis Spinellis, "Software Engineering Education Knowledge Versus Industrial Needs", IEEE Transactions on Education, 2021 (link)

arXiv preprint Georgios Liargkovas, Evangelia Panourgia and Diomidis Spinellis, "Quieting the Static: A Study of Static Analysis Alert Suppressions" arXiv preprint, 2022 (link)

1

Teaching Experience _____

Athens University of Economics and Business

Athens, Greece

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

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

Athens, Greece

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

Spring 2022, 2023

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

Athens University of Economics and Business

Athens, Greece

Introduction to Computer Science (Undergraduate Level, 1st year, Students: 180)

Fall 2022

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

Volunteering Experience & Service _____

EuroSys 2026 Edinburgh, UK

Artifact Evaluation Committee Member

2026

USENIX Annual Technical Conference 2025 (ATC '25)

Santa Clara, CA, USA

Artifact Evaluation Committee Member

Athens, Greece

2025

EuroSys 2024

Apr 2024

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

Lisbon, Portugal

April 2024

May 2022

Co-Chair of Web Pressence

1

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

Pittsburgh, PA, USA

Student Volunteer

Student Volunteer

Shadow PC Member

Athens, Greece (Remote)

ESEC/FSE '22 Conference

May 2022

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)

Honors and Awards _____

2025	Research Funding, Dreamsports AI Innovation Center, Columbia University	New York, NY, USA
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_____

Miscellaneous

Programming C, C++, Java, Go, Python, HTML/CSS, JSP, JavaScript, MATLAB, SQL, Shell scriptng

Apache Hadoop, Docker, Git, LATEX, LLM Agents, MSSQL Server, MCP, MySQL, Neo4J,

Power BI, PyTorch, Redis, SPSS, Shell (Bash/Zsh), TensorFlow2

2