Grigorios Moulkiotis

gregosmoulki@gmail.com | linkedin.com/in/grigoris-moulkiotis-48507a250/ | github.com/gmoulk

EDUCATION

National and Kapodistrian University of Athens — 2024 - Present
M.Sc. in Computer Science

National and Kapodistrian University of Athens — 2019 - 2024
B.Sc. in Informatics and Telecommunications
- Thesis: Enhanced Techniques for Testing x86 and RISC-V CPUs Against Speculation Contracts
- Supervisor: Professor Vasileios Karakostas

EXPERIENCE

Software engineer — June 2024 – Present
Intracom-Telecom
- Developed Microservice applications using Spring Boot for telecom services.
- Designed and developed front end applications using React and Angular frameworks.
- Migrated data from OracleDB to MySQL.
- Integrated Identity and Access Management systems.

RESEARCH

National and Kapodistrian University of Athens
Enhanced Techniques for Testing x86 and RISC-V CPUs Against Speculation Contracts
- Studied microarchitectural side channel attacks, speculative vulnerabilities and fuzzing using Revizor.
- Inserted timing instead of performance counters to collect traces from side channels.
- Developed instruction cache side channels detection using fuzzing.
- Ported Revizor for RISC-V architectures and integrated security vulnerability detection for the state of art vulnerabilities.

PROJECTS

Eclass Penetration testing | *PHP, JavaScript, Docker*
- Security research in order to find vulnerabilities in eclass platform.
- Implementation of security patches in order to fix the vulnerabilities.

Systems Programming | *C, C++, assembly*
- A Linux system tool using pipes and forks to monitor folder changes and notify users of file events.
- LLM benchmark analysis and enchantment using openmkl and AVX.

Extraction of data using machine learning and data mining techniques | *Python, scikit-learn, PyTorch*
- During the course of machine learning and data mining I got exposed to data mining and AI/ML methodologies in order to extract data from various sources(text,image,etc).

TECHNICAL SKILLS

Languages: Java, PHP, Python, C/C++, SQL (MySql,OracleDB), JavaScript, HTML/CSS, Assembly(x86,RISC-V)
Frameworks - Libraries: Spring Boot, React, Angular, PyTorch, scikit-learn
Developer Tools: Git, Docker, VS Code, Visual Studio, IntelliJ

VOLUNTEERING

Teaching assistant in the following courses:

Introduction to programming: 2020
Computer architecture I: 2023

LANGUAGES

Greek: Native
English: C1