Musab Oguz

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Personal Website | Github | LinkedIn

Education

Vrije University Amsterdam — Amsterdam, NL
Bachelor of Science in Computer Science — 2022 - 2025
GPA: 8.7/10

Delft University of Technology — Delft, NL
Minor in Technology, Policy and Management — 2024 - 2025

About me

Final-year Computer Science student at VU Amsterdam with experience in software development, DevOps, embedded programming, computer networks, AI and full stack development. Speaks English, Dutch, Turkish, and Swedish.

Work Experience

Tesla Inc. | Software Product Support Engineer Intern — February 2025 - Present
- Developed diagnostic tools to identify and resolve complex software issues in Tesla's vehicle systems.
- Improved Tesla's embedded Linux systems and network protocols, contributing to infotainment system stack.

VU Amsterdam | Teaching Assistant — October 2024 - Present
- Guiding 400+ students in the Operating Systems course, teaching OS essentials, C and UNIX, coding low-level operating system components like a custom shell and file system in practical sessions.
- Mentoring 5 student developer groups in Software Design course, teaching object-oriented programming, design patterns, and software engineering, with a focus on Java desktop application development.

Projects

TaskTogether Mobile App — *Kotlin, Google Firebase*
- Developed a full-stack task management app with real-time sync for couples and friends, focusing on scalable back-end architecture using Firebase with secure user auth, optimised UI and data handling.

Language Learning Flashcard App — *Java, JavaFX*
- Built a scalable language learning app in a developer team, applying OO design patterns, interactive GUI, and JSON for data persistence while applying software development cycles.

Chat Application Backend — *PHP, SQLite*
- Built a scalable backend chat application with user authentication, messaging, and RESTful APIs using Slim framework, using SQLite for data storage and optimizing performance for concurrent users.

Advanced IJVM and Custom Debugger — *C*
- Implemented an enhanced version of the Integer Java Virtual Machine with TCP networking, along with a custom terminal-based debugger inspired by GNU Debugger (GDB), focusing on low level bytecode operations.

Cyber Tetris — *Scala, OOP*
- Developed an advanced version of the Tetris game with audio, cool graphics, GUI, new blocks. and additional gameplay features using OOP and functional programming concepts.

Fast-paced Basic Multiplayer Shooter Game — *Python, Socket*
- Created a 2D multiplayer shooter game with multi-threaded UDP network programming, real-time interaction, and custom error correction protocols such as CRC and dead-reckoning.

Skills

Programming Languages: C, C++, C#, Python, Java, Scala, Kotlin, PHP, Assembly x64

Tools: Github, Microsoft Azure, VS Studio/Code, Intellij, Android Studio, Postman, PHPStorm

Core Skills: Linux, Agile Development, Scrum, Testing, Problem Solving, Data structures, System Design, Teamwork Requirements Engineering, UML, Software Design, Web development, Databases, Algorithms

Certifications

- Azure Databricks Platform Architect - Databricks
- Academy Accreditation Generative AI - Databricks
- Azure AI Fundamentals AI-900 - Microsoft
- Career Essentials Generative AI - Microsoft
- Career Essentials Software Development - Microsoft
- Java - Hackerrank
- Software Engineer Intern - Hackerrank
- C# - Hackerrank