Faisal Mujawar

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EDUCATION

Royal Holloway, University of London

B.Sc. in Computer Science

• Achieved First Class in first-year results.

Projects

RISC-V Emulator: GitHub Repository

October 2024

Expected: June 2026

- Developed a RISC-V emulator in C++ from scratch, emulating the functionality of the RISC-V architecture's instruction set.
- Implemented support for integer instruction execution, memory management, and basic debugging features.
- Utilized modular design principles to allow for future extension and optimization.
- Gained a deeper understanding of computer architecture and low-level systems programming.

Headstarter: Quant: Your AI Customer Support Assistant

September 2024

- Utilised LangChain and basic RAG for providing customer support, built using NextJS, Tailwind, and Firebase.
- Built in collaboration with my teammate utilising advanced Git repo control+rules, assigned and marked completed tasks with Trello

Data Management System

August 2024

- Integrated MySQL with python(Tkinter), reducing data entry time by 70% as compared to manually doing it via MySQL and making it more intuitive manipulate data.
- Allows the user to export the data as a .csv file.

Codedex Hackathon: Data Bolt

June 2024

• Developed a tool with 75% accuracy in predicting Olympic trends using pandas(data manipulation), matplotlib (for graphing), and scikit-learn (for AI prediction via linear regression). (This is before Russia was barred from entering, this accuracy is after accounting for this.)

Automated Game Testing and Levelling

May 2024

• Increased efficiency by using python through the use of **pyautoinput** and **threading** to automate levelling within the game and was used to limit-test game mechanics with inputs not possible by human players.

ImaginaryUni: University Management System (GitHub Repository)

December 2024

- Designed and implemented a university management system using **Spring Boot** for the backend, ensuring scalability and adherence to best practices.
- Integrated features like student data management, course enrollment, and staff administration.
- Followed Uncle Bob's Clean Code principles, Google Java guidelines, and UML-based designs to ensure a maintainable and efficient codebase.

CERTIFICATIONS, SKILLS & INTERESTS

Certifications: IEUK 2024 Technology Internship, WebX Web Development Competition, WebX Coding Competition

Technical Skills: Python (Pandas, Matplotlib, scikit-learn), MySQL/Postgres, JavaScript/TypeScript, C, Java(Springboot, JUnit, Mockito)

Extracurricular Activities:

- Hackathons: Royal Hackaway v7, Codedex 2024, Headstarter Hackathon, etc.
- Lead volunteer at Saint John's Church community fridge
- Comp. soc key member: organized mini competitive programming sessions

EXPERIENCE

Headstarter Software Fellowship

July - September 2024

Software Fellow

- Collaborated in a program focused on solving real-world software challenges, improving teamwork and technical skills through tools like **Trello** and **GitHub**.
- Gained hands-on experience with NextJS, MaterialUI, and Firebase, contributing to the development of 6 projects.

Maths Mentor, CeDAS

October 2024 - Present

Royal Holloway, University of London

- Assisted 1st-year Computer Science students with mathematics and machine fundamentals during weekly drop-in sessions, improving their understanding of key concepts.
- Developed tutoring skills by breaking down complex mathematical problems into manageable steps.
- Provided support to students from diverse academic backgrounds, helping them boost confidence and performance.