Emard Moghisi

Education

• University of Manchester

Sep 2024 – Jun 2027

Bachelor of Science in Computer Science

1st Year — Netcraft Prize Winner; ranked 4th out of 200+ in cohort

• Loughborough Grammar School

Sep 2016 - Jun 2023

A Levels: A*A*A* in Maths, Further Maths, Chemistry, Biology

GCSE: 9,9,9,9,9,9,9,8,8 in Maths, Biology, Chemistry, Physics, History, Computer Science, French, English Language, English Literature

Experience

Marandy Ltd

Jun 2023 - Sep 2024

Loughborough

Software Engineer (Volunteer)

- Built and deployed a **taxi-booking platform** with **100+ monthly active users**, enabling customers to book rides without needing to call.
- Utilised Websockets to allow for manual acceptance or rejection of jobs to make the webapp accessible for small companies who cannot take many bookings.
- Implemented secure authentication and role-based access control using JWTs and refresh tokens; integrated payments (credit card, cash, invoices) with automated receipt generation.
- Integrated a carbon footprint tracker, pulling data from the VES API to estimate per-trip CO₂ emissions and visualise historical user impact enabling users and businesses to be aware of their environmental impact.
- Containerised the application with Docker, cutting deployment time from hours to minutes and simplifying server maintenance.
- Developed a **product marketplace web application** to showcase services and products online, including an admin dashboard for content management, and order handling.

Projects

• Forum Team Project — React, Typescript, Express

Mar 2025

- Led a 5-person team to design and build a university-specific forum webapp for student collaboration.
- Defined and documented REST API specifications with Postman to streamline frontend-backend integration and reduce merge conflicts.
- Implemented secure authentication and refresh token handling; built a real-time chat module with Socket.IO.
- Organised and ran weekly tutorials and help sessions to mentor teammates, resolve blockers, and improve productivity.

Task Scheduler — React, Golang

Nov 2023

- Built a task scheduling tool for managing deadlines and reminders intended for businesses.
- Implemented a background Cron job to automatically send SMS and email notifications for upcoming tasks.

Technical Skills

- Languages: Python, TypeScript, Golang, Java, SQL
- Frameworks/Libraries: React, Express, TailwindCSS, Echo, Spring Boot
- Developer Tools: Git, Docker, Linux, SSH, VSCode, Neovim