Ethan Range

+44 7741 494542 | ethan@ethanrange.com
ethanrange.com | linkedin.com/in/ethanrange | github.com/ethanrange

Education

Imperial College London — London, UK
MEng Computing — *2020 - 2024*

- First Year 83.3% Overall (First Class), Dean's List for top 10% of cohort
- Modules including Databases, Computer Architecture, Graphs and Algorithms and Concurrency
- 99% C Group Project Mark; 1st Prize 'ARM Best Overall Project'

Loughborough Grammar School — Loughborough, UK
Secondary School — *2013 - 2020*

- 4 A*s at A level in Mathematics, Further Mathematics, Physics and Computer Science
- 8 9s and 2 A*s at GCSE; A in FSMQ (Additional Mathematics)

Experience

Imperial College London — October 2021 – Present
Undergraduate Teaching Assistant — *London, UK*

- Aided delivery of and provided support to students for the first year lab curriculum
- Provided one-to-one help sessions for students studying Haskell, Kotlin and Java

Accrosoft — July 2019 – August 2019
Software Engineering Intern — *Loughborough, UK*

- Shadowed Development and QA teams through the software production process
- Gained experience with full-stack development, languages and platforms including JavaScript, CSS and Node.js
- Produced an independent project website with a Node.js backend and login functionality

Projects

C Summer Group Project | *C* — May 2021 – June 2021

- Worked as a group of 4 to create an ARM11 emulator and assembler, with a procedural maze generation extension
- Created full documentation, report and presentation video along with unit test suite
- Made extensive use of DevOps tools including Git, GDB, GNU Make, Valgrind and custom a testing framework
- Achieved final overall mark of 99% and awarded ARM prize for 'Best Overall Project'

Decim | *Svelte, Node.js, SQLite* — March 2021

- Competed as a team of 3 in the 48 hour IC Hello World hackathon to create a Node.js web app
- Produced a carbon footprint estimator by analysing Monzo bank statements
- Worked on Monzo API interaction and transaction retrieval, as well as front end component design in Svelte

Neuroevolution Self-Driving Vehicles | *Python, Processing* — September 2019 – March 2020

- Developed a neural network library from scratch in Python, featuring genetic algorithms for network selection
- Created 2D Physics based top down driving simulator with Processing
- Implemented self-learning onto driving simulator allowing for track completion by vehicles
- Produced full report on the design, implementation and testing of the program

Technical Skills

Languages: Preferred: Java, C, Python; Experience with: Haskell, Kotlin, JavaScript
Frameworks / Technologies: Node.js, HTML / CSS, SQL
Developer Tools: Comfortable with Git, Unix / Linux, Docker, Proxmox VE, JUnit, GDB, Valgrind

Interests

Languages: Studying French and Russian alongside primary course
Home lab / Self hosting: Hosting virtualised infrastructure and containerised services