


EDUCATION

- **BSc Computer Science** – University College London – 2019-2022

Second-year grade average: 82.3%

Notable coursework (able to provide code upon request):

- A journey planner for the  London rail network (tube & others) entirely in C.
 - * Shows paths with least station, least interchange or paths that avoid certain fare zones.
- A Tetris bot in Python which can reliably keep itself alive long enough to reach a 1000 blocks limit, and scored 3rd place in the 140 person class.
- Designed and wrote a system specification for a hypothetical good delivery service for vulnerable people during COVID, matching requests with volunteers with an efficient algorithm. Received a top submission award.
- Led a 3-person team on implementing a bash-like shell in Java, with piping, substitution, glob expansion, and 97% test coverage. Built an [online sandbox](#) for the shell with Docker, Rust and Xterm.js.


- **A-Level** – (Shenzhen, China) Nanshan Chinese International College – 2017-2019

Math, Further Math, Physics and Economics – A*A*A*

WORK EXPERIENCE

- Technology Intern – **Marshall Wace LLP** – Jul-Aug 2021
 - Designed and built a release dashboard for developers to search for and check the build and deploy status of their projects.
 - Used React (front-end), Python/fastapi (backend) and [Redisgraph](#) (a graph database based on Redis which supports [Cypher](#)). Used APIs to read information from different services including Kubernetes. Used [Prometheus](#) to export metrics which helped debug performance issues.
 - Worked in a team with 2 other interns. Delivered a project presentation and demo to the whole of the Technology division, and incorporated developer feedback. Wrote documentation for extending the system to add other service integrations.
- Software Developer ^{Jun 2021} → **Lead Developer** – CORE Data Systems Ltd – Jul 2020-...-present (part-time)
 - Educational game development for GCSE Physics/Chemistry/Biology.
 - Debugged a large (200 kLOC) React project to make sure everything works on all major browsers.
 - Implemented new requirements in the existing PHP (Symfony) based system.
 - * Learned PHP and Symfony concepts on the go.

COMPETITION

- **HIRED** – UK Virtual Coding Challenge – 7th Jul 2020
 - Won first place in an algorithm contest of 180 people.
 - Rewarded with £1,000 Tesco (sponsor) gift card.
- Facebook – Hack-a-project – 29th Feb 2020
 - Team of 4 people won second-place (against 8 other teams)
 - Designed a basic React & Nodejs App () for bringing people who want to watch the same movie together.

SKILLS

- Languages: (primary) Python, JavaScript/TypeScript, Rust; (fluent) C++, Java
- Web development: React, Svelte, Plain CSS & SCSS.
- Backend: NodeJS (Express), Python FastAPI, PostgreSQL, Redis.
- Linux (scripting, programming, server administration), Git, Docker, Kubernetes
- Security (web & native) & Basic cryptography.