


EDUCATION

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

Have consistently achieved high grades. 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 persons 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.

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


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

WORK EXPERIENCE

- **Frontend developer** – CORE Data Systems Ltd – Jul 2020-present (part time)

Educational game development for middle/high school subjects



COMPETITION

- **HIRED** – UK Virtual Coding Challenge – 7th Jul 2020
 - Won first place in an algorithm contest of 180 people.
 - Rewarded with £1,000 Tesco 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: (competent) Rust, JavaScript/TypeScript; (reasonably fluent) Python, Go, Java/Kotlin, C++; \LaTeX .
- Web development: React/[Svelte](#), Nodejs, Webpack. Plain CSS & SCSS.
- Linux (scripting, programming, server administration and some understanding of the inner-workings), Git, Docker. Some basic experience with OpenGL and Android native development.
- Security (web & native) & Basic cryptography. [Interactive blog article on certificate transparency](#)

PERSONAL PROJECTS

- **status.maowtm.org** (): simple server monitoring with web push notification – Aug-Sept 2019.
 - Backend built with Rust, using the [Rocket](#) framework and SQLite database.
 - Frontend built with [Svelte](#).
- **paper.sc** (): Past paper finder & search engine for a high school exam board – 2016-2019
 - Average of ~9000 daily searches over 365 days (2019-2020); recommended by a number of teachers.
 - Backend built with Node.js, using MongoDB and Elasticsearch.
 - Frontend built with React, using Webpack for bundling. Acts as a PWA with ServiceWorker.
 - Made a PDF viewer: using PDF.js for rendering, wrote own input handling (touch screen & Macbook trackpad pinch-to-zoom, inertia scrolling, etc.).
 - Parses the document to find matching question numbers and hence create hyperlinks in the PDF viewer between question paper and mark scheme for the same question.
 - Includes extensive unit tests, and builds on Travis CI.

OTHER INTERESTS

- Able to do some basic 3D modelling with Blender ([some works I've done](#)); also interested in animation and design.
- Studying university-level mathematics on my own: Analysis, Linear Algebra, Differential Equations.