

EDUCATION

University of Manchester
Computer Science, BSc (Hons)

Manchester, UK
Oct. 2020 – July 2023

The Royal Grammar School

A-Levels:

High Wycombe, UK
Sep. 2018 – June 2020

A, A*, A, A in Computer Science, Physics, Chemistry, and Mathematics respectively*

AS Levels:

Sep. 2018 – June 2020

A in Further Mathematics

Extended Project Question (EPQ):

Sep. 2018 – May 2019

A for essay titled "On the future of power generation from Fission, Fusion, and Black Holes"

EXPERIENCE

ARM Ltd.

Cambridge, UK

Work Experience

July 2021 – Sep. 2021

- Worked on a legacy internal application, modernising and extending its functionality
- Participated in daily standups, bi-weekly sprint reviews, and code review
- Worked with CMake and modern C++17

Pretius sp. z o.o.

Warsaw, Poland

Work Experience

Aug. 2019 – Aug. 2019

- Migrated an existing web app between platforms and wrote technical documentation for the new platform
- Learnt Agile methodology, experiencing Kanban-style organisation and bi-weekly sprint reviews
- Learnt Jira for task management, task-estimation, and to decompose large tasks into smaller chunks

PROJECTS

Hyperloop Manchester | C, C++, Embedded, AVR

Nov. 2020 – Current

- Currently the Software Team Head, architecting the software aspect of the pod
- Researching and implementing standards and algorithms for driving a Hyperloop pod safely
- Organising work using Kanban and Jira, and having weekly standups to track progress
- Managing all source code using Git

UniCS GameDev | C#, Unity, Typescript, Next.js

Nov. 2020 – Current

- Currently the Co-Head of the UniCS GameDev society, leading the development team
- Collaborating with team members in an Agile environment with weekly standups
- Planning tasks and estimating their requirements (time-wise and content-wise)
- Planning, researching, writing, and delivering tutorials on C# and Unity
- Designed and implemented the UniCS GameDev website in next.js using Typescript

StarSim | C#, Avalonia UI, SQLite

Apr. 2019 – Oct. 2019

- Researched efficient algorithms for solving n-body problems
- Implemented oct-tree algorithm for solving 3D n-body problems
- Visualised live problem with projection from 3D to 2D
- Documented research and final solution extensively
- Checked in all work to Git to ensure safe backup and edit history tracking

SKILLS

Soft Skills: Communication, Teamwork, Leadership, Project planning, Organisation, Time management

Languages: C, C++, C#, CMake, Make, Bash, Python

Frameworks: ASP.Net, Unity, PlatformIO

Developer Tools: Git, Jira, Visual Studio, VSCode

INTERESTS

I enjoy active sports and have achieved a 1st Dan black belt grade in DART Karate, where I am an instructor to younger students. I have participated in Micromouse competitions, building and programming maze solving robots in Forth. I also took part in the Greenpower electric race car club at my school and was heavily involved in the design and implementation of the electronics of the car. We managed to achieve 3rd place in nearly all of the races we entered in our first season as a club, where we were competing against both home and international teams. Unfortunately an unfixable accelerator pedal failure causing us to drop out of the finals during the practice lap.