

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"

St. Michael's Catholic School

A-Levels:

High Wycombe, UK
Sep. 2018 – June 2020

A in Polish*

EXPERIENCE

Pretius sp. z o.o.

Warsaw, Poland

Work Experience

Aug. 2019 – Aug. 2019

- Migrated an existing web app between platforms
- Wrote extensive technical documentation for new platform
- Learnt Agile methodology, experiencing Kanban-style organisation and bi-weekly standups
- Learnt Jira for task management, including estimating the duration of tasks and the decomposition of complex tasks into manageable chunks
- Reviewed a number of articles to be posted on the company blog for correct syntax and grammar

PROJECTS

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

Nov. 2020 – Current

- Researching and implementing standards and algorithms for driving a Hyperloop pod safely
- Collaborating with team members and having weekly standups to voice concerns and share constructive criticism
- Organising tasks and sprints in the Kanban-style using Jira
- Checking in all work to Git to maintain a central master branch

UniCS GameDev | C#, Unity

Nov. 2020 – Current

- 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

NetSharp | C#

Dec. 2019 – Current

- Implementing fast and memory efficient network transfer
- Providing a Task based wrapper around the event-driven async architecture

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, Resilience, Organisation & Time-management, Self-sufficiency

Languages: C, C++, C#, Python

Frameworks: ASP.Net, Unity, PlatformIO

Developer Tools: Git, Jira, Visual Studio, VSCode

INTERESTS

I enjoy active sports such as swimming and have achieved a 1st Dan black belt grade in DART Karate, where I am an instructor. I have participated in Micromouse robot building competitions, having built and programmed drag racing, line following, wall following, and maze solving mice. The programming was done in Forth, an imperative stack-focused language. I also took part in the Greenpower electric racecar club at my school and was heavily involved in the design and programming of the electronics of the car. We managed to achieve 3rd place in the majority of the races we entered in our first season as a club, with an unfixable accelerator pedal failure causing us to drop out of the finals during the practice lap.