



I am a dedicated student who has been aspiring to work in the games industry since childhood. Much of my free time is spent developing gameplay systems and learning the theory of computer graphics and game engines.

Education

University College London (UCL)

BSc Computer Science

Achieved a first (1st) for first year

Bloomsbury, London

Sep 2017 – Jun 2020

Banbridge Academy

5 A-Levels (A*A*AAB)

Maths, Software Systems Development, Physics, Biology, Further Maths

Self-taught Further Maths

Trophy for top A-Level results

Banbridge, Northern Ireland

Sep 2015 – Jun 2017

Technical Skills

Languages: C#, C/C++, Java, Python, Haskell, PHP, SQL, JavaScript, HTML, CSS

Software: Unity, Visual Studio, Android Studio, Maya

Other: Linear Algebra, Git, ER Diagrams, Class Diagrams

Work Experience

Microsoft/UCL Institute of Child Health

Programming Intern – Project Fizzyo

Bloomsbury, London

Jun 2018 – Aug 2018

- ... Developed and debugged Unity games for cystic fibrosis patients controlled by breathing apparatus
- ... Met with the patients in the hospital and received feedback from them during development
- ... Worked alongside MSc students and had stand-up meetings with Microsoft engineers

Personal Projects

URaider (<https://youtu.be/DcrMnW7qbGc>)

Dec 2017 – Sep 2018

- ... Unity game framework that includes all Tomb Raider game mechanics, such as climbing, combat, swimming, crawling, pick-ups, inventory, doors/switches and enemy AI
- ... Programmed custom camera and character controls for locomotion and combat
- ... Programmed a completely autonomous and accurate ledge detection system
- ... Implemented custom physics equations to adjust jump trajectory based on ledge distance

Academic Projects

NHS Video Labelling (<https://youtu.be/tlXr47YpXq4>)

Jan 2018 – Apr 2018

- ... Team leader on an Android app for the NHS that captures videos for annotation with emotions
- ... The data is exported to train machine learning models to recognise emotions
- ... Liaised directly with a client from the NHS to determine requirements and get feedback
- ... Achieved the top grade (1st) for this module

Arduino Platformer

Nov 2017

- ... Python platforming game that takes input from buttons and an LDR on an Arduino

Activities

Pixel Jam Hackathon

Oct 2017

... Gained experience working in a team while building a game in Unity

UCL Technology Society

Sep 2017 – Present

... Member of the technological society at UCL

Python Tutor

Sep 2016 – Apr 2017

... Improved communication skills by mentoring GCSE students in Python

School Prefect

Sep 2016 – Jun 2017

... Held responsibility and employed leadership skills when carrying out assigned tasks