

## EDUCATION

### University College London (UCL)

Bloomsbury, London

MEng Computer Science

Sep 2017 – Jun 2021

*Year one: Theory & Algorithms, Robotics AI, Discrete Maths, Engineering Challenges, Principles of Programming*

## TECHNICAL SKILLS

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

**Maths:** Linear algebra: dot product, cross product, matrices, vectors; trigonometry; equations of motion

**Software:** Unity, Visual Studio, Android Studio, Maya

## WORK EXPERIENCE

### Microsoft/UCL Institute of Child Health

Bloomsbury, London

– *Programming Intern: Project Fizzyo*

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 SCRUM 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 a finite state machine using object-oriented programming techniques
- Programmed a completely autonomous and accurate ledge detection system
- Implemented custom physics equations to adjust jump trajectory based on ledge position

## ACADEMIC PROJECTS

### Immersive Sports VR

Oct 2018 – Apr 2019

- Team leader on a virtual reality project to simulate competitive cycling
- Working with Gear VR and Dolby Atmos to produce a fully immersive experience

### 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
- Liaised directly with a client from the NHS to determine requirements and get feedback
- Achieved the top grade (1<sup>st</sup>) for this module

### Arduino Platformer

Nov 2017

- Python platforming game that takes input from buttons and an LDR on an Arduino
- Added an online leader board using Microsoft Azure

## 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 attending presentations and other events