

EDUCATION

Imperial College London

September 2017 - Present

- MEng (Hons) Computing
- First year: 1st class
- Relevant modules: Soft. Eng. Design, Programming I/II/III, Databases, Algorithms I/II, Introduction to C++

Hills Road Sixth Form College

September 2015 - June 2017

- A-Levels: Maths (A*) Chemistry (A*) Further Maths (A) Physics (A) EPQ (A*)

EXPERIENCE

HSBC Part-Time Intern

November 2018 - Present

- Currently working to build a scalable recommender system that suggests financial products based on a large volume of time-series data.
- Built with Python (Tensorflow).

Wiser Tech Academy

September 2018 - Present

- Work to connect clients looking to hire technology graduates directly with students on campus.

Author on planckti.me (Volunteer)

December 2017 - Present

- Active contributor of articles that aim to provide readers with a clear understanding of concepts in Computer Science via concrete examples and a hands-on approach.

NOTABLE PROJECTS

Pintos

October 2018 - Present

- Group project to extend an Operating System framework to support advanced features over 3 months.
- Acted as group leader to delegate tasks and manage sub-teams.
- Responsible for implementing effective priority scheduling, user programs and virtual memory.
- Built with C and 80x86 assembly language.

Poisonous Mushroom Classification — sonjoonho.github.io/mushroom-classification

August 2018 - September 2018

- Performed an in-depth exploratory data analysis on a dataset of the physical characteristics of over 8000 poisonous and edible mushrooms.
- Trained a classifier to predict the edibility of a mushroom based on a selected subset of these features.
- Approach emphasised effective choice of metrics and hyperparameters in order to tackle class imbalance.
- Built with Python (Numpy, Scikit-learn, Pandas).

Flask Wii — sonjoonho.github.io/flask-wii

July 2018 - August 2018

- Created and deployed an experimental web application that allows the user to turn their smartphone into a 3D controller.
- Utilised WebSockets to enable realtime user interaction.
- Built with Python (Flask) and JavaScript.

ARM Assembler and Emulator (87%) — sonjoonho.github.io/arm

May 2018 - June 2018

- Worked in a small team to develop and document an ARM emulator and assembler from scratch.
- Developed and tested a networked, motion controlled *Pong* game as an extension using OpenCV and SDL2.
- Built with C, C++, and ARM11 assembly language.

ACHIEVEMENTS

Palantir Data Ethics Case Competition 1st Place — sonjoonho.github.io/data-ethics

September 2018 - October 2018

- Coordinated a diverse, multi-disciplinary team in order to submit an *Executive Summary* proposal detailing the technical and ethical challenges surrounding large-scale data collection.
- Selected out of teams worldwide to present our proposal to a panel of judges at the *Amsterdam Privacy Conference 2018*.

Imperial College Taekwondo Secretary & Webmaster

June 2018 - Present

- Responsible day to day running of club activities and liaising with *Imperial College Union* and other clubs.
- Built the club website using the Laravel PHP web framework.

LANGUAGES & TECHNOLOGIES

Proficient with: Java, Python, C, Git, Linux/Unix

Comfortable with: Haskell, JavaScript, C++, SQL, LaTeX, Tensorflow, Scikit-learn

Exposed to: Ruby, PHP, Docker