Joon-Ho Son

MEng Computing at Imperial College London

+447925425326 — json0820@gmail.com — sonj.me — github.com/sonjoonho

EDUCATION

Imperial College London Sep 2017 - Jul 2021

- MEng (Hons) Computing
- Second year: 80% (1st class); first year: 72% (1st class)
- 90% Year 2 Computing Laboratory; 90% Year 2 Group Project

Hills Road Sixth Form College Sep 2015 - Jun 2017

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

EXPERIENCE

Google, STEP Engineering Intern Jul 2019 - Sep 2019

- Designed and implemented a resource optimisation tool for a distributed data synchronisation service using **Go** and **protocol buffers**.
- 52% projected RAM utilisation savings in production pipelines by applying computed optimal resource footprints.
- Increased productivity of thousands of engineers by integrating with an internal incident response mangement tool to reduce toil involved with diagnosing underprovisioned pipelines.

Wiser, Tech Academy Sep 2018 - Sep 2019

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

PROJECTS

Mobilise sonj.me/mobilise May 2019 - Sep 2019

- Developed a volunteer coordination web application for *City Harvest London*, a charity aiming to end food waste.
- Awarded the *IBM 2nd Year Group Project Prize* and backed for further development by *Charity Insights*.
- Used full-stack **JavaScript** to build a user-friendly web frontend (**React**) and powerful backend (**Node**, **PostgreSQL**) hosted on **AWS**.

WACC Compiler Jan 2019 - Mar 2019

- Worked in a small team to develop a compiler for the WACC language in **Kotlin** from scratch.
- Implementation included advanced class functionality, control flow analysis, and automatic reference counting.

Pintos Operating System Oct 2018 - Dec 2018

- Acted as group leader to delegate tasks and manage sub-teams.
- Responsible for implementing effective priority scheduling, user programs, and virtual memory in **C**.

Poisonous Mushroom Classification sonj.me/mushrooms Aug 2018 - Sep 2018

- Performed an in-depth exploratory data analysis on the feature set of over 8000 poisonous and edible mushrooms.
- Trained a classifier in **Python** 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.

Flask Wii Interactive Webapp sonj.me/flask-wii Jul 2018 - Aug 2018

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

ACHIEVEMENTS

Palantir Data Ethics Case Competition (1st Place) sonj.me/data-ethics

- Coordinated a multi-disciplinary team in order to present a proposal detailing the technical and ethical challenges surrounding large-scale data collection at the *Amsterdam Privacy Conference 2018*.

SKILLS & INTERESTS

Languages: Proficient with Go, Python, JavaScript; familiar with Java, C, Kotlin; previously used Haskell, C++, TypeScript, SQL.

Technologies: Experienced with Git; familiar with Linux/Unix, LaTeX, CI/CD (Travis, Circle, GitLab); exposed to Docker, AWS, Perforce.

Extracurricular: Imperial College Taekwondo Vice-president '19/20, Secretary '18/19.