James Ball

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Experience

Palantir • 2022 (6-month placement)

Palantir solves the world's hardest problems with disparate data.

- Worked closely with UK government and local authorities to develop the Homes for Ukraine platform to help resettle 100,000+ refugees
- Had a high impact on a medium-sized team of other engineers and sales experts
- Cleaned-up and pipelined poor-quality data
- Created advanced user workflows for entity resolution, allowing for revertible, traceable, and reliable deduplication of objects

Skills developed:

- TypeScript, Python, Apache Spark, Client relations, User research

Netcraft • 2020-2021

Netcraft specialises in finding and taking down web scams that impersonate other companies.

2020 + 2021 Internship

- Researched and automated the discovery and takedown of 100s of technical support scams
- Prospected countermeasures for web scams I uncovered to companies worth over $400B
- Automated phone scam detection using Twilio

Skills developed:

- Perl, Regex, Bash, JavaScript, MySQL, Git, PHP, Prospecting, Research, Client relations

Teaching Assistant • 2020-2022

Teaching tutorials for Java, Kotlin, C, and Haskell for first year computing students at Imperial.

Thirtyone:eight • 2016-2019

Thirtyone:eight is a safeguarding charity and largest provider of DBS checks in their sector.

- Overhauled the company website
- Developed a hardware auditing program to gather data about staff PCs

Skills developed:

- C#, Entity Framework, Azure, MySQL

Skills

Proficient in Java, Python, PyTorch, TypeScript, Apache Spark, C++, C, Scala, Regex, Linux, Git, Perl
Exposed to Dart / Flutter, C#, JavaScript, Kotlin, PHP, Haskell

Education

Imperial College London: Sep 2019 – Jun 2023

- Studying towards an integrated MEng in Computing (with AI and ML)
- On-track to achieve a first with very high third-year percentage of 85.5%
- Over 90% in software engineering and machine learning modules

Wilmington Grammar: Sep 2012 – Jun 2019

- *A Level*: Computer Science A*, Maths A*, Further Maths A* (Self-taught)

Awards

- Achieved Year 2 + Year 3 Dean's List
- Won first place prizes at both IC Hack 20 + IC Hack 21
- Awarded first place Ocado Technology Group Project Prize for KidneyCaliper

Projects

osci-render – GitHub - video

- Cross-platform software used by 100s of music + visual artists for making music by drawing images on an oscilloscope using audio
- Implemented an audio synthesiser in **Java** that renders 3D objects, images, and text on a CRT
- Developed with other open-source collaborators alongside feedback from artists
- Designed to be extensible, allowing artists to synthesize their own audio + visuals with **Lua**

KidneyCaliper – video – report

- Automated deep-learning-based workflow for kidney pathologists
- Automatically annotates and analyses regions of a kidney biopsy slide image
- Dramatically speeds up pathologists' workflow and provides valuable statistics that were previously infeasible to obtain
- **Python** backend, **TypeScript/React** frontend
- Agile development in a team of 6

Protectly - presentation

- Mobile app written in **Flutter** that facilitates the physical wellbeing and safety of young women during nights out
- Implemented backend in **Python** to plan an event and allow real-time tracking of friends
- Carried out detailed interactive interviews with our target audience
- 3rd highest ranked second-year project