ANDREW J. YOUNG

(+44)79 1406 9349 ⋄ andrewjunyoung1@gmail.com ⋄ bit.ly/ajylinkedin

BACKGROUND

Imperial College London
Computer Science and Mathematics (BEng)

Interests (in no order): Algorithms (High-performance, high-assurance), Optimization, Security, Cryptography, Data science and ML

EXPERIENCE

Global Technology Infrastructure, JPMorgan Chase   from 2019
Software Developer   *London, UK*
· Worked on a framework to detect and resolve when actual system state differs from desired system state.
· Worked on compilation; parsing; identity; events; database management; python.
· Built and managed a consumer facing API for describing desired system state. 0 to production API in 3 months.
· Trained in agile; certified in application security and threat modeling.

Workspace analytics, BP   2018
Data analytics   *London, UK*
· Tasked with learning about employee habits using 3 months of data collected from the workplace.
· Used python and R to discover and visualize patterns in data and present these to clients.

Quantitative Risk (qRisk), JPMorgan Chase   2018
Software Developer   *London, UK*
· Designed and wrote the overnight batch process for the company's risk platform.
· Wrote optimized python code to interact with existing APIs and legacy code.

Opesci Group, Imperial College London   2017
Research Intern   *London, UK*
· Made tutorials in Jupyter notebooks for solving complex ODEs.
· Worked in python to solve reaction diffusion problems using the team's package and added to the code base.

Hoteling   2016
Asakusa Guest House Manager   *Tokyo, JP*
· Managed a 4 story guest house, developed a language acquisition program for international students, and performed English-Japanese-Chinese translation.

PROJECTS

Symboard (Python) A text-based keyboard creator which allows users to create fully functional, UNIX compatible keylayout files using a concise, user-defined specification.

MVL (Multi Valued Logic) (Python) Wrote a package to implement multi valued logic systems in python.

FlowMonster (Java, Spring Boot) Designed and wrote a trading robot to participate in market simulations against other teams. Won in my team's division and progressed to the finals.

An investigation into membership inference attacks on big data (BEng thesis) Implemented and optimized a membership inference attack using supervised and unsupervised machine learning. Used 2 data sets (taxi and telecoms data) to determine if an individual was sampled to calculate a summary statistic. Analyzed the performance of the attack under different conditions.

***Quest.io* (Javascript)** Made a web application using React Native, mongoDB, and Google APIs for tourist groups to plan daily travel routes. Implemented voting, a chat, and a route planning algorithm.

Pintos **(C)** Built on top of a legacy code base in order to produce a fully functional concurrent OS.

PlugInBaby **(Python, node.js)** An IOTA (IoT cryptocurrency) application which finds charging stations and automatically transacts for electricity on the IOTA tangle. Designed in cooperation with the IOTA developers.

WACC compiler **(C)** Designed and built a compiler and code-generator from WACC into Arm11.

ACHIEVEMENTS

2017 **IOTA Hack winner** Designed and built the winning design, which finds charging stations and transacts for electricity automatically on the IOTA tangle.

2016 **Built and launched an H-class high-powered rocket** in a team of 4. Apogee was reached at 1.5 km before returning to ground in a state fit for reuse.

2014 **President and founder of an ISSDC finalist team.** Founded an independent finalist team to the International Space Settlement Design Competition. Elected company president at the national and international finals.

SKILLS

English	Japanese	Chinese	French	Spanish	Polish	German
Native	Fluent (C2)	Intermediate (B2)	Intermediate (B1)	Basic (A2)	Basic (A2)	Basic (A2)

Expert in C, Java, Spring boot, LaTeX, Linux, Python, SQL, UNIX, Windows, Git, Jetbrains IDEs, Jupyter notebook, Vim,

In-depth knowledge of CSS, Haskell, Django, Django rest framework, Javascript, Prolog, R, x86 Assembly, PostgreSQL, Scikit-learn Gnu bison,

Experience with Kafka, Azure cloud stack, AWS, Cloud foundry, React (native), Dolphin (python), Devito (python),

Core competencies: Agile methodologies; Data science; Network, web, and application security (SQL, Javascript, PHP), Project management; Software architecture

First aid