

# ANDREW J. YOUNG

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## EDUCATION

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### Imperial College London

2016-2019

Computer Science and Mathematics (BEng)

Societies: Debating, Dept. of Computing (DoCSoc), Mathematics, Finance & Investment

### Queen Elizabeth's School, Barnet

2009-2016

A2: 4 A\*s (highest) in Math, Further Math, Physics, and Chemistry; GCSE: 13 A\*s (highest)

**Interests (no particular order):** Algorithms (Complexity, high-performance, high-assurance, financial), AI (Reinforcement learning, deep learning), Security & cryptography, Big data, Quantum computing (algorithms, security).

## PROFESSIONAL EXPERIENCE

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### qRisk, JPMorgan

Jun 2018-Aug 2018

*Software Developer*

*London, UK*

- Programmed a complete overnight batch process for the company's new risk platform
- Developed high performance python code to interact with existing APIs and legacy code to run the batch.

### Opesci Group, Imperial College London

May 2017 - Aug 2017

*Research Intern*

*London, UK*

- Made tutorials in jupyter notebooks for solving high-level ODEs.
- Worked in python to solve reaction diffusion problems using the team's package and added to the codebase.

### JPMorgan Chase

Apr 2017

*Spring into Technology*

*London, UK*

- Shadowed employees from software divisions and engaged in group coding projects.

### Morgan Stanley

Mar 2017

*Spring Insight: Technology*

*London, UK*

- Shadowed tech divisions and learned about the applications of technology in banks.

### Hoteling

Jul 2016 - Sep 2016

*Asakusa Guest House Manager*

*Tokyo, JP*

- Managed a 4 story guest house in Tokyo, developed a program for international students to learn foreign languages, and translating between English, Japanese, and Chinese.

### Queen Elizabeth's School

Sep 2014 - Jun 2016

*Volunteer Japanese Teacher*

*London, UK*

- Ran weekly lessons and taught a class of students Japanese to enable them to pass the JLPT N5.
- Organized a letter exchange program with a high school in Tokyo.

### BlueCrest Capital Management

Jul 2014

*Work Experience*

*London, UK*

- Worked alongside the Volatility Arbitrage Group and shadowed employees in the software division to understand how their system conducts risk analysis

## PROJECTS

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**Quest.io (Javascript)** Created a web application using React Native, mongoDB, and google APIs which implemented a voting platform, chat, and a route planning algorithm for groups to plan daily travel routes.

**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 transacts for electricity automatically on the IOTA tangle. Designed in cooperation with the IOTA developers.

**WACC compiler (C)** Designed and built a compiler and code-generator in C for the WACC programming language into Arm11.

**Altair Fintech Project (C)** Designed and built a scraping and analysis tool for algorithmically trading cryptocurrencies in a 2-man team.

**Arm11 compiler (C)** Built a compiler into C for the Arm11 language, and made arm11 code compile on a raspberry pi with this.

## ACHIEVEMENTS

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

**2016 Constructed 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.

**2016 Scored in the 94th percentile in the JLPT N2 exam.**

**2015 Completed the UCL-Japan Young Challenge**, participating in a cultural exchange and Japanese language programs in the UK.

**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.

**2014 Grade 8 Cello with distinction**

## LANGUAGES

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**English:** Native

**Japanese:** Fluent (C1)

**Chinese:** Intermediate (B2)

**De, Es, Fr:** Basic

## TECHNICAL SKILLS

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**Software Langs:** Python, C, Java, Haskell, Javascript, HTML, CSS, L<sup>A</sup>T<sub>E</sub>X, x86 Assembly, SQL, noSQL

**Software Tools:** MS Office, Re-

act Native, MacOS, Linux, Git, Windows, Vim, Emacs, IntelliJ IDEA, jupyter notebook

**Typing:** 135 wpm (eng), 150 cpm (jpn)