

Jonathan Chiu

Phone number: 07745395826

Email: Jonathanchiu02@gmail.com LinkedIn Profile: <https://www.linkedin.com/in/jonathanchiu-b302a7166/>

SUMMARY

Highly motivated Software Engineer and Mathematician with a proven track record of developing high-quality web applications that increase product performance and user engagement. Skilled in continuous integration and delivery, unit testing, and optimising program execution efficiency. Strong academic background in Mathematics and Computer Science, with experience in Blockchain and Financial Operations Engineering.

WORK EXPERIENCE

Software Engineer, Ting, January 2022 - Current

- Developed a Web Application utilising React to create a 21% increase in product performance and a 35% increase in user engagement. Implemented continuous integration and delivery practices to ensure proper code deployment.
- Identified 35% of previously missed errors through implementing unit testing, improving code reliability and maintainability thus gaining experience in Agile development.

Blockchain Research Engineering Intern, Queen Mary University of London, June 2022 – August 2022

- Checked the Contextual Equivalence of programs in Ethereum Smart Contracts to find bugs by using Operational and Game Semantics in collaboration with Trinity College Dublin. Optimised program execution efficiency by improving code coverage accuracy by 5% and decreasing execution time by 20%.
- Wrote smart contracts using Solidity which were then translated into HOBbit, developing programming skills in OCaml and familiarity with Blockchain.
- Minimised bugs by 50% and improved analysis time by 80% with tools such as Ethereum's Truffle and static code analysers.

Teaching Assistant, Queen Mary University of London, September 2021 – Current

- Taught hundreds of students across modules such as Algorithms & Data Structures, Software Engineering, Procedural Programming, Logic & Discrete Structures, and Probability and Matrices.
- Marked students' assignments and answering enquiries.
- Invented and created questions for the modules that reflected learning outcomes, prepared and monitored examinations.

Finance Operations & Tech Engineering Intern, Rabobank, July 2019 - August 2019

- Successfully developed and implemented a cutting-edge algorithm using Java to merge data sets, resulting in a remarkable 7% improvement in the live environment.
- Demonstrated exceptional project management skills by delivering a comprehensive system design, utilising Visio software and adhering to strict deadlines.
- Collaborated with a team of four experts to research and analyse challenges faced by the banking industry and delivered a compelling presentation to an audience of industry professionals.
- Acquired valuable expertise in the Murex System and effectively migrated the test environment of Trading software, reducing run time by 5%. Proactively identified and resolved issues, ensuring a smooth transition to the new system.

EDUCATION

BSc Queen Mary, Mathematics & Computer Science, September 2020 – July 2023

Average: 87.8% (Expected First Class)

Elthorne Park High School, September 2013 – August 2020

A-levels: A*AAA (Extended Project, Maths, Further Maths, Computer Science)

SKILLS

Software

- Microsoft Office, Word, PowerPoint, Excel, GitHub, Visual Paradigm, Visio, and Latex.

Mathematics

- Linear Algebra, Calculus, Probability & Statistics, and Linear Programming.

Programming Languages

- Experience in Java, JavaScript, Django, React, Vue JS, SQL, Solidity, R, and Python.

PROJECTS

Stock Trading System

- Designed and created a stock trading system using Java and created the GUI using Swing.
- Implemented API calls to use the live feed of data in the system.

Extended Project Qualification, Bitcoin Dissertation

- Undertook an EPQ dissertation on Bitcoin, focussing on the workings of Bitcoin,
- Developed understanding of Cryptography in Bitcoin such as the use of Merkle trees when verifying transactions and the Blockchain.