Toby Chen

Website | Email | 07714 387919 | GitHub | LinkedIn

EDUCATION

BSc Hons in Mathematics | 1st (Expected) | Queen Mary University of London
London
09/2023 – 06/2026

Pure & Computational Mathematics. Notable modules include *Numerical Programming in C and C++*, *Partial Differential Equations* and *Probability & Statistics*.

CertHE in Mathematics & Physics | 1st (Achieved) | Heriot-Watt University
Edinburgh
09/2022 – 06/2023

Advanced level mathematics and physics courses. Notable modules include *Programming in Java* and *Academic Presentations & Seminars*.

A levels in Maths, Computer Science & Biology | C, B, B | Brockenhurst College
Brockenhurst
09/2020 – 06/2022

A-levels in Mathematics, Computer Science & Biology. Notable experience includes *GCSE Chinese*.

EXPERIENCE

Financial Analysis
TobyChenFinance - Personal
2025

Author financial analysis on Substack. Wrote recent piece about effect on gilt yields given Labour potentially breaking manifesto.

Algorithmic Trading Developer
TOADTrade2 - Personal
2025

Python trading app with custom backtester, quant signals (momentum, mean reversion), and portfolio optimisation.

Fullstack Developer
Portfolio Website - Personal
2025

Built a website with React using TS to display my work in an RPG style pseudo-game.

Data Engineer
Data Annotation - Work
2023 – Present

Work as a data engineer focusing on data preprocessing, annotation & review for machine learning models. Build test suites on Docker to validate model performance.

Maths Teaching Assistant
Cantell School - Experience
2024

Assisted during lessons to help with maths work. Also tutor maths for A-levels & MAT.

Immersive Labs CTFs
Immersive Labs - Challenge
2022

Completed 5 level 8 CTFs. Worked on many different CTFs Cyber Security challenges.

AWS Summit
Amazon - Event
2023

Attended the summit to learn about cloud computing trends and services related to AWS.

SKILLS & INTERESTS

Programming
Python, C#, C++, Java

Lifetime programmer. Understand OOP, functional and procedural programming. Best language is Python. Second is C++. Favourite project is Python trading algorithm.

Trading
Statistics, Analytics

Invest in financial instruments. Understand and use technical analysis. Use statistical methods to analyse data. Understand PDEs like Black-Scholes.

Mathematics
PDEs, Stats, Chaos

Strong maths skills. Applied & axiomatic understanding of stats, calculus & numerical methods.

Linux & DevOps
Arch, Bash, Docker, AWS

Use Arch Linux (BTW). Containerisation, version control and cloud via personal projects and work. Understand system security for Linux & Windows.

Pentesting & Security
OWASP, Crypto

Completed CTFs and bug bounties. Understand vulnerabilities and security practices. Deep comprehension of cryptography via number theory.

Politics & Finance
Podcasts, Financial Times

Follow politics and related news for markets. Read and listen to related content like *The Rest is Politics*. Currently reading *Mrs Thatchers Economic Experiment* by William Keegan.

Sports
Confidence

National kickboxer. Play rugby and BJJ at university. Train in MMA, looking to compete. Sports scholar at college and university. TASS athlete for sports England.