

WORK EXPERIENCE

G-Research

Software Engineer in Core Colo Engineering

Sep 2022 — June 2024

- Developing and deploying algo services to 20+ co-located datacenters, monetizing the trading platform within the Research Engineering function.
- Adapted the software stack to support algo trading services to run on a machine set up for feed services, which have a different CPU architecture and build pipeline. This touched upon the allocation logic, service config, high performance messaging middleware, and service sharding driven by my analysis of market data volumes.
- Maintaining the stability of the algo trading stack during daytime/overnight on-call shifts, debugging issues in our messaging stack (Kafka and Aeron), service discovery (Consul), and deployment (ArgoCD, or our in-house service lifecycle for physical machines).

Software Engineer Intern

Jul 2021 — Sep 2021

- 12 week internship as a software engineer in the Realtime Quant Tyburn Tactical team in Research Engineering.
- Built an ASP.NET web app using the Blazor UI framework to provide views into the development pipeline of a crucial monolithic application required for trading. This includes the state of regression tests and live production instances of the app.

Softwire

Software Developer Intern

Jul 2020 — Aug 2020

- 8 week summer internship as a software developer. Worked with a 100k+ LOC codebase on a multiplatform (with Kotlin and Swift) mobile app; production code for an app that had 110k+ downloads.
- Developed a supporting static site built with the React + Gatsby framework, to onboard users.

EDUCATION

University of Cambridge

Advanced Computer Science, MPhil

Oct 2024 —

- Taught degree with chosen modules primarily covering deep learning.
- Research project: deep learning on hypercube data collected through Raman spectroscopy on tissue samples, to assist cancer diagnosis.

University College London (UCL)

Computer Science, BSc (Hons)

Sep 2019 — Jun 2022

- First Class Honours.
- Made the UCL Engineering Dean's List for strong academic performance.

A-levels

Maths (A*), Further Maths (A*), and Computer Science (A*)

2017 — 2019

Publications

Tomy, Chris, et al. "Modus: a Datalog dialect for building container images." Proceedings of the 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering. 2022. <https://doi.org/10.1145/3540250.3549133>

SKILLS

- Programming Languages — Python, C#, Bash (scripting), Java, Rust
- ML/DL — PyTorch, HuggingFace Libs (Fine-tuning LLMs, QLoRA, etc.)