

WORK EXPERIENCE

G-Research

Software Engineer

Sep 2022 — Now

- Developing and deploying algo services to 20+ co-located datacenters, monetizing the trading platform within Research Engineering (ResEng).
- Adapted the trading stack to support algo services running on a machine (normally) set up for feed services, which have an entirely 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.

Department of Computer Science, UCL

Programming Tutor

Oct 2020 — Mar 2021

- Supporting first year undergraduates in developing their skills in four programming languages (C, Haskell, Java and Python).

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 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 (in order of expertise) — Python, C#, Bash (scripting), Java, Rust
- Cloud Native Development — Docker, Kubernetes