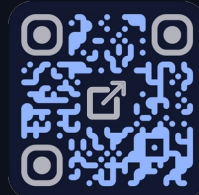



Tim Child
Full Stack Developer | PhD Physics



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 adventuresoftim.com

 github.com/TimChild

Personal Statement

I build things — From the hardware and electronics to convert an SUV into a 4x4, to the lab equipment and analysis software required to increase the rate of data acquisition and analysis by 1000x, to my most recent project: A full stack web application enables creating bespoke model-agnostic agentic workflows with cyclic graph processing utilizing custom retrieval augmentation and data pipelines.

I'm looking for challenging work with good colleagues.

Experience

Full Stack Developer AthenaInstruments 2024 – 2025

Developed a full web application from scratch following [modern software development practices]. My work involved creating data pipelines, integrating third party APIs, working with cutting edge generative AI technologies, refactoring and structuring a medium sized (~50 K lines) codebase, automation of testing, developing continuous integration and deployment workflows, database management and migrations, provisioning cloud infrastructure, and more. The main tech stack was centered around the python ecosystem.

Researcher Stewart Blusson Quantum 2018 – 2024
Matter Institute, UBC, Canada

I built custom hardware and software for acquiring and analyzing data (increasing throughput by ~1000x) as part of my development of an innovative measurement technique for nanoscale circuits that exhibit exotic quantum behaviors. Responsibilities also included designing and fabricating quantum qubit devices using state-of-the art fabrication facilities, and commissioning, maintaining, and upgrading dilution refrigerators. I published papers in respected journals including Physical Review Letters.

Teacher University College London 2016 – 2017

Obtained a masters level teaching degree specializing in science education, including teaching in multiple London schools.

Private Tutor London 2012 – 2018

Tutored students aged 4 – 18+ in math and science to fund my undergraduate studies.

Education

- **PhD Physics**, University of British Columbia, QuEST Scholarship 2018 – 2024
- **PGCE Science**, University College London, IOP Scholarship 2016 – 2017
- **BSc Physics**, Imperial College London, First Class Honors 2011 – 2014

Languages

- Python
- SQL
- Bash
- Javascript
- Lua
- Go
- C++
- Igor (C like Matlab)
- ...

Technologies

- Docker (+compose)
- Git
- Github Actions
- Flask + Dash
- FastAPI + Reflex
- UV (+ poetry)
- Postgresql
- Redis
- Qdrant
- Digital Ocean
- Cloudflare
- Langgraph + Langchain
- ...

Personal and Interests

- US/UK citizen
- Open work permit in Canada (PR pending)
- Arctic expeditions
- Caving, skiing, ice climbing