

Timing Liu (Tim)

Full-Stack Clinician · Software Engineer, Applied AI & Healthcare

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PROFILE

Full-stack clinician with experience building clinical products, production web systems and applied ML. Co-founder of Finomics, an NHS rostering platform piloting at two hospitals; builder and operator of Sync, a live calendar-scheduling product. Brings clinical experience together with engineering across web, data and AI systems.

ENGINEERING EXPERIENCE

Finomics · Co-Founder & Product Engineer

Since 2025

Co-founded a cloud platform for NHS rostering, pay and leave, replacing spreadsheet-based processes with compliant, optimised workflows for hospitals and clinicians.

- Build across React, TypeScript, Python and Postgres; maintain infrastructure with Terraform and GitHub Actions CI/CD.
- Developed the constraint-solving scheduling engine, translating NHS working-time requirements into product logic.
- Piloting at two hospitals, with estimated savings of about £7,500 per clinician a year.

Sync · Founder & Full-Stack Engineer

Since 2025

Built and operate a live product that reads group calendars, identifies genuine availability and books venues.

- Next.js 15, React 19, TypeScript, Prisma and Postgres, with calendar integrations, authentication and booking flows.
- Release automation, automated backups and database-migration checks.

Mansfield Advisors · Technical Consultant

Since 2020

Build data pipelines, text-mining workflows and models for healthcare, veterinary and pharmaceutical due diligence across the UK, China, Germany and Spain.

ADDITIONAL ENGINEERING WORK

ClinicianWiki · Founder & Full-Stack Developer

Founded and built a collaborative medical-knowledge platform end to end: customised MediaWiki, Apache, MySQL, Linux and Azure DevOps. Grew into a 10-person charity and led to an NHS Clinical Entrepreneur place.

Cambridge Clinical Trial Unit · Full-Stack Mobile Developer

Built mobile data-capture applications for three live COVID-19 trials during the first wave. Xamarin across iOS and Android.

Arete MedTech · Software Engineer

Shipped a COPD/asthma tracking app with design and hardware colleagues. Xamarin, Flutter, iOS and Android; received a return offer.

Agentic Todo · Personal Project

An agent-native task board with intake, triage and a durable dispatch layer for execution and due diligence; escalates only irreducible decisions. Node, TypeScript, SQLite, Plane API, REST, MCP and Restate.

AI & DATA WORK

Prima Mente · Deep Learning Engineer

Since 2024

Build and evaluate components of Pleiades, an epigenetic foundation-model programme spanning 90M to 7B parameters and 1.9T methylation-data tokens. Work includes model evaluation and tooling for dependable clinical ML.

Moorfields Eye Hospital / Cambridge Centre for AI in Medicine · Deep Learning Engineer

2021 to 2024

Built multimodal models combining retinal images, genetics and health records. Work contributed to a retinal foundation model in *Nature* and studies in *JAMA Psychiatry* and *Ophthalmology Science*.

Wellcome Sanger Institute · Statistical Geneticist

2020 to 2022

Built statistical-genetics pipelines on HPC for cohorts of about 44,000 people, including GWAS and polygenic-risk analyses.

TECHNICAL SKILLS

Product: TypeScript, JavaScript, React, Next.js, Python, SQL, Postgres, Prisma, REST, OAuth and third-party integrations.

AI: PyTorch, transformers, foundation models, multimodal and causal modelling, evaluation, GPU and HPC.

Infrastructure: Terraform, CI/CD, release automation, backups and safe database migrations.

Also: R, C#, Shell, Flutter, Xamarin, MongoDB, Azure DevOps, web scraping and NLP.

EDUCATION & RECOGNITION

University of Cambridge · MB BChir, Medicine (2025) · MA (Hons), Engineering in Information & Bioengineering (2022)

Awards: Cambridge Engineering Project Prize (top reinforcement-learning project); Engineers' Progress Prize; NHS Clinical Entrepreneur; MIT COVID-19 Challenge winner.

Research: 27 publications, 3 patents and 1,450+ citations, including clinical foundation models, genomics and applied AI.

CLINICAL WORK

Resident Doctor, Chelsea & Westminster Hospital, since 2025. Frontline work across acute medicine, emergency medicine and geriatrics informs practical product decisions for clinical workflows.