

# Dr Christopher Lovejoy

MA (Cantab), MB BChir, MSc (ML), MBA

Full-Stack Machine Learning Engineer with unique healthcare domain expertise (as former MD), with >7 years building products and leading teams at intersection of AI and healthcare including >2 years at the bleeding edge of applying LLMs in healthcare

## EDUCATION

### UNIVERSITY COLLEGE LONDON

2019-2021 • MSc (DISTINCTION, TOP 5%)

Data Science and Machine Learning

### UNIVERSITY OF CAMBRIDGE

2014-2017 • MB BChir

Medicine

### UNIVERSITY OF CAMBRIDGE

2011-2014 • MA (TOP 25%)

Natural Sciences (Pathology)

### ADAMS GRAMMAR SCHOOL

2004-2011 • GCSE, AS, A-LEVEL

A\* in all subjects (highest UK grade, 4.0 GPA equivalent), ranked 1st in school

## TECHNICAL SKILLS

### LANGUAGES

Proficient: Python • JS/TS • SQL

Competent: Rust • Ruby • Julia • Go

### FRAMEWORKS & LIBRARIES

Machine Learning and Data Science

PyTorch • JAX • TensorFlow • PySpark • scikit-learn • pandas • Biopython • Streamlit

Web development

ReactJS • NextJS • Jekyll • NodeJS • FastAPI  
• Playwright • Flask • Django • Tailwind CSS

### DATABASE & DATA STORAGE

PostgreSQL • MongoDB • Firebase • DynamoDB • Hadoop

### DEVOPS & INFRASTRUCTURE

AWS • Git • Docker • CI/CD with GitHub Actions • Bash • Terraform • Datadog

## LINKS

Website:// [www.chrislovejoy.me](http://www.chrislovejoy.me)

Github:// [chris-lovejoy](https://github.com/chris-lovejoy)

LinkedIn:// [dr-christopher-lovejoy](https://www.linkedin.com/in/dr-christopher-lovejoy/)

YouTube:// [ChrisLovejoy](https://www.youtube.com/@ChrisLovejoy)

Twitter:// [@ChrisLovejoy\\_](https://twitter.com/@ChrisLovejoy_)

## EMPLOYMENT

### HEAD OF CLINICAL AI / SENIOR AI ENGINEER | ANTERIOR

Aug 2023 - Present | New York City, US // London, UK

- 1st hire at healthcare LLM startup backed by Sequoia/NEA, growing company to >50 headcount, >\$240m valuation and covering >50M American lives
- Designed and built our eval system, now powered by team of >10 clinicians, translating review data into system improvements (described here and here)
- Built initial RAG app which achieved SOTA clinical reasoning using new applied LLM methodology I devised, which took us from 0 to 2 customers (>\$250k ARR)

### APPLIED AI ENGINEER / CONSULTANT | INDEPENDENT

Jan 2023 - Aug 2023 | London, UK

- Built >10 projects at intersection of health & AI for seed to series C start-ups
- Projects included LLM-powered simulated medical patient, predictive model for addictive cravings using mobile app data, sleep stage classification using a novel hardware device, dynamic action recommendations for public health app

### CTO (FOUNDER) | BILLIONS HEALTH

Sept 2021 - Dec 2022 | London, UK

- Built a decentralised marketplace for health data, enabling individuals to own their multimodal health data and earn by sharing it for health research.
- Raised >\$200k pre-seed investment (led by EF), led tech team of 4 engineers.

### DATA SCIENTIST | DUNNHUMBY

June 2020 - Jan 2021 | London, UK

- Analysed petabytes of retail transaction data (using PySpark) to generate actionable, commercially-relevant insights for world's largest retailers.

### AI TECH LEAD / DATA SCIENTIST | CERA CARE

Apr 2018 – Sept 2019 | London, UK

- Led team building AI tools to better manage people's care at one of Europe's fastest growing tech companies from seed to series B (now \$500M ARR)

### MEDICAL DOCTOR | NATIONAL HEALTH SERVICE (NHS)

Aug 2017 – May 2020 | London, UK

- Doctor in emergency med, psychiatry, cardiothoracics, cardiology, geriatrics
- Quality-improvement projects in scan workflow and health monitoring

## SELECTED PROJECTS [FULL LIST ON GITHUB]

Evidence-Based Medicine MCP: Typescript

[bit.ly/med-mcp](https://bit.ly/med-mcp) Ground LLM answers in latest medical evidence

Blood Glucose Forecasting: Python

Built 1st DL algorithm to predict blood glucose from noninvasive measurements

## SELECTED PUBLICATIONS [FULL LIST ON GOOGLE SCHOLAR]

Artificial Intelligence versus Clinicians: Systematic Review of Design, Reporting Standards, and Claims of Deep Learning Studies  
BMJ 368 (Mar. 2020) p. m689. BMJ Publishing Group, 2020

*First systematic review comparing AI and doctors, nearly 1,000 citations, prompted new guidelines for clinical AI research (SPIRIT-AI, CONSORT-AI)*