

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

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 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)