

Aditya Prabakaran

London, UK | +44 (0) 7587 460771 | aditya.prabakaran@gmail.com | [LinkedIn](#) | [Github](#) | [My Personal Website](#)

Highly motivated Computing student with two years of production-level development experience. Advanced in building efficient applications and software for challenges and personal projects. Extensive leadership experience in technical and non-technical roles, eager to push boundaries and experiment with new technologies. Loves using technology to solve complex challenges.

EDUCATION

Imperial College London; MEng in Computing (AI & ML)

On track for First Class (GPA 4.0)

**Graduating in Jun
2027**

WORK EXPERIENCE

VaNI MedTech (Startup)

Full-stack and AI/ML developer

June 2025 – Present

- Architected, built, and deployed the company's flagship full-stack web application (React, TypeScript, Next.js, FastAPI, Redis), enabling scalable, real-time multi-user usage with Docker and Kubernetes orchestration.
- Optimized backend concurrency, load balancing, reducing latency from 500 ms to 120 ms, supporting 100+ active users.
- Implemented AWS-based CI/CD pipelines with automated testing and deployment, shortening release cycles from 2 days → 6 hours and cutting production bugs by 76%.
- Integrated AI and data workflows using Model Context Protocol to power LLM-driven features with improved accuracy.
- Collaborated cross-functionally to align system design with product goals, ensuring scalability and 99.9%+ uptime in production.

Trajex (Startup)

Machine Learning Developer

October 2024 – June 2025

- Successfully deployed of LLama3.2-7b resulting in a 12% reduction in latency and 20% in cost for OpenAI API calls.
- Led core development of flagship product, ensuring they meet user needs and expectations.
- Strong product design and iteration skills, informed by feedback from stakeholders, using AI to develop a robust backend.
- Experience in effective pitching and communication towards investors, onboarded of K3 Capital Group as a client.

Altus Reach (Startup)

Machine Learning Engineer (Contractor)

Jan 2024 – October 2024

- Developed a ML algorithm with a team of 3 that improved predictive accuracy by 19% in video saliency detection.
- Worked with team to deploy a cloud-based infrastructure that supports our flagship product. (Microsoft Azure)
- Engaged in full-stack development to enhance the functionality of company website. (TypeScript, React, NextJS)

PERSONAL PROJECTS & ACADEMIC EXPERIENCE (CODE PRESENTED ON [GITHUB](#))

- **Day Trading Algorithm (QuantConnect)** – Implemented quantitative trading strategies in C++ using RSI, momentum, and volatility metrics (Sharpe & Sortino ratios).
- **WACC Compiler (Scala)** – Designed and programmed compiler with LLVM backend, GitLab CI/CD, and Docker; deployed via PaaS for production use.
- **x64 Assembler, Task Manager GUI & Pintos (C)** – Developed low-level programs in a collaborative setting.
- **AdiPedia Discord Bot (JavaScript)** – Created an interactive bot with games and dynamic embeds using DiscordJS API.
- **SwyftGesture (Python)** – Created for hands-free gestured computer input using MediaPipe; won 1st place at a hackathon.
- **Movie Recommendation System (PyTorch, NumPy, Pandas)** – Built a hybrid model leveraging LightFM dataset for personalized film suggestions.
- **Music File Sorter (Kotlin/Java)** – Applied OOP principles to automate music organization.
- **Calculus Differentiation Program (Haskell)** – Implemented functional techniques for symbolic differentiation.
- **Reddit News Bot (Python)** – Automated daily tech, politics, and culture summaries via Reddit API.
- **My Webpage (React, Next.js, TypeScript)** – Designed and deployed personal portfolio on Vercel.
- **D.O.S.A. (C++, Local LLM)** – Built a local AI assistant for note-taking, timers, and search using OOP principles.

SPOKEN LANGUAGES

Native proficiency in English, French and Tamil
Reading and Speaking proficiency in Spanish and Hindi