Manik Aggarwal

EDUCATION

2021–2025 Integrated Master's in Computer Science at King's College London

(1st Class Honours)

Dissertation: [Public Health Insights through Graph Theory and Search Games]

WORK EXPERIENCE

Backend Software Engineer - Canonical

June 2025 - Present

- Joined Canonical as a full-time Backend Software Engineer, working on the commercial systems team.
- Developing and maintaining backend services using Go and Python with resilient Temporal workflows, ensuring high performance and scalability.
- Implemented new CI/CD pipelines with GitHub Actions for automated testing and deployment.
- Collaborating with cross-functional teams to design and implement new features, improving system reliability and user experience.

Full-Stack Software Engineer Intern - Verisk Analytics

June 2024 - August 2024

- Built interactive chart configuration feature in Wagtail (Django) CMS, enabling analysts to preview and embed data visualizations in insights.
- Designed REST APIs handling large data volumes; serialized configurations for Angular frontend to render live graphs.
- Upgraded legacy codebase to latest version, reducing platform load times by 60%.
- Collaborated with stakeholders to align features with business requirements.

DevOps Engineer Intern - Hewlett Packard

April 2023 - September 2023

- Developed browser-based KVM viewer with Cloudflare and Azure AD authentication; optimized system resources via systemd and VNC.
- Automated infrastructure provisioning using Terraform and Perl scripts.
- Built web server with Perl/Mojolicious backend to streamline PDU management workflows.

Projects

AWS Impact Accelerator Program

October 2024-March 2025

- Developed a storybook management mobile app for Staffordshire Council, reducing manual paperwork by 85%.
- Written in React Native with Expo, using AWS S3 for storage and AWS Cognito for authentication.
- Deployed a Python OpenAPI Docker container to EC2 using ECR for scalable services.

Contract Negotiation Automation Tool (Ashurst)

February 2024

- Built system to automate contract draft comparison using OpenAI APIs for change detection and summarization.
- Developed Next.js frontend and Go/Gin backend generating blackline PDF comparisons stored in AWS S3.
- Delivered MVP improving per contract review cycle from 2 weeks to 3 days (average).

Health Hub November–March 2023

- Built cross-platform wellness app with React Native frontend and Node.js/Express backend.
- Integrated Supabase for authentication and data storage; designed UI with TypeScript and Tailwind CSS.

Professional Skills

Languages (incl. markups)
Libraries and Tools

Python, Go, Scala, Perl, Bash, C++, Java, JavaScript/Typescript, Rust, SQL, Haskell React Native, Django, React, Git/Github, PostgreSQL, Terraform, Cloudflare, Mojolicious, IntelliJ, Arduinos, MS Office, Unix, PyCharm, Android Studio, VSCode, Gin, REST API Active member of AI and cybersecurity societies; Hackathon participant (ICHack2024, EasyAmmutable); Community work at Oxfam with inventory automation; Skilled badminton player; Keen cyclist and runner; DIY electronics enthusiast

Extracurricular