

# Manik Aggarwal

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## EDUCATION

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2021–2025 Integrated Master's in Computer Science at **King's College London**  
Dissertation: [\[Public Health Insights through Graph Theory and Search Games\]](#)

(1st Class Honours)

## WORK EXPERIENCE

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### Backend Software Engineer - Canonical

June 2025 - Present

- Designed and delivered a division-wide workflows repository in Go, now used as a template by multiple teams and hosting all workflows for the platform.
- Replaced minute-loop polling with resilient **Temporal** parent/child workflows and retry policies, handling hundreds of syncs daily with fewer transient failures and manual interventions.
- Migrated CI/CD from Jenkins to **GitHub Actions** across 3–4 repositories, reducing build-publish-refresh time from **90 to 15 minutes (86%)** and speeding up engineering iteration.
- Built **gRPC APIs** for complex legacy pricing and edge-case business logic; authored an ADR for Temporal adoption and delivered Juju, network routing, proxy configuration, private registry and SSDLC guardrails.

### Full-Stack Software Engineer Intern - Verisk Analytics

June 2024 - August 2024

- Built interactive chart configuration in Wagtail (Django) CMS, enabling analysts to preview and embed visualisations in reports (adopted by 10 analysts with positive feedback).
- Designed REST APIs handling large data volumes; serialized configurations for Angular frontend to render live graphs.
- Upgraded legacy codebase (Angular) to latest version, reducing platform load times by **65%**.

### DevOps Engineer Intern - Hewlett Packard

April 2023 - September 2023

- Built browser-based KVM viewer with Cloudflare and Azure AD authentication, reducing VM provisioning time to engineers by **92%** and eliminating a major manual pain point.
- Automated infrastructure provisioning using Terraform and Perl scripts.
- Developed Perl/Mojolicious web server to streamline PDU management workflows.

## PROJECTS

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### AWS Impact Accelerator Program

October 2024–March 2025

- Developed a storybook management mobile app for Staffordshire Council, reducing manual paperwork by **85%**.
- Built with React Native (Expo), AWS S3 and Cognito to simplify field use and improve day-to-day workflow speed.
- Deployed Python OpenAPI services as Docker containers to EC2 via ECR.

### 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** across **20–30** review cycles.

## PROFESSIONAL SKILLS

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Languages      Go, Python, Scala, Perl, Bash, C++, Java, JavaScript/TypeScript, Rust, SQL, Haskell

Frameworks     Temporal, gRPC, Gin, Django, React, React Native, Mojolicious, Node.js

Infrastructure   GitHub Actions, Docker, Terraform, PostgreSQL, AWS (S3, EC2, Cognito, ECR), Cloudflare, Linux