Amritpal Singh Kaur

MSc Advanced Computer Science Student

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PROFESSIONAL SUMMARY

Multilingual Graduate Software Engineer (EN ES CA PA HI) with an MSc in Advanced Computer Science at Queen Mary University of London (2026) and a BSc 2:1 from Staffordshire University. Enterprise IT experience across regulated financial services (Bank of America), global travel technology (Amadeus) and energy (ENI). Author of 18 public GitHub repositories spanning cloud security, cryptography, AI-powered PWAs, full-stack applications and data analytics. Seeking graduate roles in software engineering, cloud/DevOps, data, or cybersecurity.

PROFESSIONAL EXPERIENCE

Deployment / Breakfix Engineer, *Bank of America*
- Supported enterprise desktop systems in a secure, highly-regulated financial environment, ensuring compliance with industry standards.
- Diagnosed and resolved complex hardware and software issues, minimising downtime across multiple business units.
- Led large-scale deployment initiatives and asset management programmes supporting hundreds of end-users.
- Implemented security patches and system updates in line with financial industry regulations.

Field Support Technician (Level 2), *Amadeus Global Travel Technology*
- Delivered secure laptop and mobile device replacements with enterprise application installations adhering to strict security protocols.
- Provided escalation support for complex technical issues, collaborating with cross-functional teams to resolve incidents efficiently.
- Maintained detailed documentation of system configurations and troubleshooting procedures.

IT Technician / Support, *ENI Energy*
- Provided frontline support for hardware, software and network connectivity, maintaining high system availability.
- Proactively monitored enterprise system uptime and documented technical procedures for the team knowledge base.

EDUCATION

MSc Advanced Computer Science, *Queen Mary University of London*   2025 – Present
Cloud Computing Machine Learning Security & Auth Functional Programming Data
Analytics Research Project

BSc (Hons) Computer Science - 2:1 Honours, *Staffordshire University*   2022 – 2025
Full-Stack Dev Cloud Computing AI Cybersecurity Mobile Dev Databases Networking
UX Design

TECHNICAL SKILLS

Programming
Java, JavaScript (ES6+), TypeScript, Python, C# (.NET), HTML5, CSS3, REST APIS, Functional Programming

Security
Network Security, IAM, AES-256 Encryption, JWT Auth, CVE Analysis, Secure Design Patterns, FinTech Compliance

Frameworks & Libs
Node.js, React, Express.js, NumPy, Pandas, Scikit-learn, Matplotlib, Android SDK

Web & Mobile
Progressive Web Apps, Service Workers, Android Development, Responsive Design, WCAG Accessibility, Canvas API, UX/UI

Cloud & DevOps
AWS (EC2, S3, Lambda, IAM, CloudWatch), Docker, Kubernetes (basics), Linux/Unix, Windows Server, CI/CD

AI & Data
Machine Learning, NLP, Statistical Analysis, Data Visualisation, Predictive Modelling, Model Evaluation, AI Integration

Databases
SQL, MySQL, PostgreSQL, SQLite, Database Design, ER Modelling, Query Optimisation, Data Structures & Algorithms

Languages Spoken

English
(Native)

Spanish
(Native)

Catalan
(Native)

Punjabi
(Native)

Hindi
(Professional)

FEATURED PROJECTS

SOC Command Center, *https://github.com/Amrit004/soc-command-center*
Enterprise Security Operations Center dashboard with real-time threat detection, live attack map, incident response, and compliance tracking (GDPR, SOC2, ISO27001). Simulates enterprise SOC workflows with animated threat visualisations.

AiTravel/Wandr — AI Travel Planner PWA, *https://github.com/Amrit004/enterprise-analytics-dashboard*
Installable Progressive Web App with client-side AI matching engine, NLP query processing, budget planning and full offline support via service workers. Cross-device responsive.

Enterprise Analytics Dashboard, *https://github.com/Amrit004/enterprise-analytics-dashboard*
Enterprise-grade analytics platform with real-time KPIs, AI-powered predictions, live user tracking, and interactive data visualisations. Built with Next.js, Recharts, and custom AI prediction algorithms. Features revenue forecasting with 94% confidence interval.

CipherOS - Cryptography Toolkit, *https://github.com/Amrit004/CipherOS*
Browser-based cryptographic toolkit with AES-256 encryption, SHA/MD5 hashing, JWT decoder, and password strength analyser using Web Crypto API. Military-grade encryption entirely client-side.

NetScan Pro - Network Vulnerability Scanner, *https://github.com/Amrit004/Netscan-pro*
Nmap/Nessus-style scanner simulation with 4 scan modes and CVE database including Log4Shell, EternalBlue, and 10,000+ vulnerabilities. Built comprehensive CVE database and implemented multiple scan algorithms.