

# ADITYA JOSHI

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## PROFESSIONAL SUMMARY

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Computer Science graduate with a strong foundation in software development, DevOps, and cloud systems. Skilled in designing scalable architectures, automating deployment workflows, and ensuring system reliability. Driven to contribute as a backend or platform engineer building high-performance systems. **Right to work in the UK without sponsorship.**

## EDUCATION

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### PES University

September 2021 - June 2025

Bachelor's, Computer Science

GPA: 8.72

- Key Modules: Computing in Python, Distributed Systems, Cloud Computing, Databases, DSA, OS, Networks, AI/ML.
- Prof. CNR Scholarship (Top 10%), IEEE Publications on DarkWeb Threat Detection & Football Analytics using ML.

## PROFESSIONAL EXPERIENCE

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### Nokia

Bangalore, India

Software Engineering Intern

January 2025 - June 2025

- Automated KPI Degradation Check, reducing analysis time by 80% via rule-based logic & visual reporting dashboards.
- Enhanced ESM by debugging logic affecting cell sleep; integrated visualizations for energy/cost impact for all vendors.
- Developed a Configuration validation framework with OOP principles, boosting test validation efficiency by 90%.
- Collaborated in Agile sprints, participated in peer code reviews, and supported testing automation.

## PROJECTS

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### IncidentResponder.AI (Autonomous Cloud SOC & Threat Response Simulator) - [Link to project](#)

- Automated cloud SOC simulator using Terraform, containerized AI agents to analyse AWS GuardDuty incidents.
- Developed multi-agent workflows for log forensics, MITRE ATT&CK attribution, embeddings retrieval & remediation.
- Architected modular pipelines with fallback, secure config handling, audit logging & reproducible IaC deployment.

### Containerized ML Orchestration Pipeline - [Link to project](#)

- Containerized and automated a full Geneformer fine-tuning workflow using Docker + Airflow, improving reproducibility.
- Reduced manual run setup time by 70% through automated data mounting, output versioning, and DAG orchestration.
- Integrated Prometheus, Grafana, cAdvisor & StatsD to enable real-time monitoring of model runs & resource usage.
- Migrated to EKS using KubernetesPodOperator, Helm-managed Airflow/observability & GPU-enabled node groups.

### IoT Fleet Management System - [Link to project](#)

- Built production-grade fleet tracker with Next.js, FastAPI, TimescaleDB & MQTT for live vehicle telemetry & geofence.
- Architected event-driven microservices with MQTT for pub/sub, achieving <2s latency for 1k+ telemetry updates.
- Implemented async queries, real-time analytics dashboards with telemetry aggregations & interactive Leaflet maps.
- Deployed serverless arch to AWS using Terraform - IoT Core, Lambda, API Gateway with CI/CD & event processing.

## SKILLS

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- **Programming:** Python, Java, C/C++, JavaScript (Node.js, React, TypeScript), HTML/CSS, SQL, Bash, Go, C#, .NET
- **Backend & APIs:** FastAPI, Flask, Django, GraphQL, Websockets, ORM, Microservices, Alembic, JWT, OAuth2, OOP
- **Cloud:** AWS, Azure, GCP, Networking (DNS, TCP/IP, Load Balancing, Subnets, Security Groups), Nginx, Helm, VPC
- **Databases & Messaging:** PostgreSQL, MySQL, MongoDB, Redis, NoSQL, Apache Kafka, RabbitMQ, Celery, MQTT
- **Observability & DevOps:** Prometheus, Grafana, Loki, OpenTelemetry, ELK, Docker, Kubernetes, Terraform, CI/CD
- **AI/ML & Automation:** PyTorch, Scikit-learn, Pandas, NumPy, MLflow, LangChain, RAG, n8n, Fine-tuning, Airflow
- **Development Practices:** Linux/Unix CLI, Agile & Scrum, Code Reviews, System Design, Git, Software Testing

## CERTIFICATIONS

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Docker & Kubernetes, FastAPI, AWS Essentials (EC2, ECS, EKS, Lambda, RDS, S3, IAM), CI/CD (GitHub Actions, Jenkins), Terraform, Ansible — covered containerization, cloud services, infrastructure as code, and DevOps automation.