

## PROFESSIONAL EXPERIENCE:

### Software Engineer | *Quad K Technologies*

**Jan 2024 – Apr 2025**

- Engineered the migration of monolithic modules into scalable microservices using Java, Spring Boot, and Python FastAPI, designing a hybrid architecture that resulted in a 20% reduction in development latency.
- Enhanced a reporting API project by creating a generic data procurement API in Java, reducing development efforts from 2 weeks to 1 day.
- Architected high-throughput backend systems utilizing Spring Boot for core transactions and FastAPI for asynchronous services, optimizing resource utilization by 20% and ensuring 99.9% availability across distributed applications.
- Established Infrastructure as Code pipelines using Terraform to manage Azure Virtual Machine Scale Sets, creating reusable modules that automated environment provisioning and eliminated configuration drift.
- Led Root Cause Analysis for high-priority production incidents, implementing preventative monitoring alerts and security configurations that sustained a 95% client satisfaction rate.
- Optimized data access layers by implementing Redis caching strategies and tuning complex SQL queries, reducing database load by 30% and ensuring sub-second response times for high-traffic API endpoints.
- Designed the frontend architecture for 3 high-performance web applications using Angular, RxJS, and React, defining coding standards that improved frontend-backend integration efficiency by 25%.

### Software Development Engineer | *Amazon*

**Jul 2022 - Jan 2024**

- Led the end-to-end launch of 3 new AWS regions (HYD, ZRH, ZAZ) for Elastic Block Store, coordinating cross-functional teams to architect scalable infrastructure using EC2, RDS, and S3.
- Architected automated deployment pipelines using AWS CDK and CloudFormation, utilizing Java, Node.js, and TypeScript to reduce the region provisioning lifecycle from 3 weeks to 1 week.
- Engineered a permanent solution for EBS snapshot copy limits that resolved a primary driver of customer friction, resulting in a 50% reduction in critical support escalations.
- Led the design and implementation of the Metering Auditor system, improving billing data accuracy by 30% and reducing processing latency by 25% through optimized integration logic.
- Established a comprehensive observability framework with 50+ custom CloudWatch alarms and automated remediation scripts in Ruby and Java, resulting in a 30% reduction in system downtime.
- Designed serverless integration workflows between Amazon Connect and internal systems using AWS Lambda and Java, automating real-time data exchange to enhance operational efficiency.
- Enforced high engineering standards by conducting over 100 rigorous code reviews and mentoring junior developers, ensuring consistency and maintainability across the codebase.

### Software Engineer | *IVY Comptech, India*

**Jun 2018 - Jan 2021**

- Implemented Kubernetes orchestration to deploy applications across 15 cloud providers, successfully reducing deployment lead time from 48 hours to 15 minutes while ensuring high availability.
- Configured CI/CD pipelines using Jenkins, Docker, and Ansible for over 500 servers, facilitating a seamless data center migration from the UK to Dublin.
- Contributed to the critical "Boris" infrastructure migration project, achieving a zero-data-loss transition from Gibraltar to Dublin within a tight 3-hour downtime window.
- Automated 80% of manual administrative tasks on Windows environments by developing robust PowerShell scripts, significantly reducing operational overhead.
- Developed Shell scripts to automate routine maintenance on UNIX/Linux servers, increasing system processing speed by 20%.
- Configured Grafana dashboards and CloudWatch-style alerts to monitor system health, enabling the team to proactively identify and resolve performance bottlenecks.
- Provided on-call production support, efficiently debugging software issues and resolving incidents to minimize service downtime.

### Software Engineer Intern | *Emefocus*

**Dec 2016 – Jan 2017**

- Developed a comprehensive School Management System to streamline academic processes, creating interactive modules for attendance tracking and assignment submissions.

- Built robust server-side APIs using Java and Node.js (Express), designing MongoDB schemas to efficiently store and retrieve user data and academic records.
  - Implemented secure authentication and authorization using JSON Web Tokens (JWT), ensuring strict role-based access control for students and teachers.
  - Engineered a high-performance Single Page Application (SPA) using Angular, which improved page load speeds by 40% and ensured seamless navigation.
  - Designed a responsive user interface using HTML5, CSS3, and Bootstrap, utilizing JavaScript and jQuery to increase user interaction metrics by 25%.
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## PROJECTS:

### AI-powered Resume Screening with RAG:

*Sep 2025 – Dec 2025*

- Developed an intelligent resume screening system using **Hugging Face RAG** and **spaCy** for resume parsing and skill extraction, matching candidates with job descriptions. Used **Flask** for backend development and **MongoDB** for storing resumes, enabling fast retrieval and scalable data management. Optimized the model to handle diverse resume formats and fine-tuned it for domain-specific job roles, improving recruitment efficiency and candidate ranking.

### Distributed E-commerce Microservices Platform:

*May 2024 – Aug 2024*

- Designed a hybrid backend architecture integrating Django for secure order management and FastAPI for high-concurrency product search, achieving sub-50ms response times for read-heavy operations. Implemented asynchronous background task processing using Celery and Redis to decouple invoice generation and email notifications, improving overall system throughput by 40%. Engineered secure RESTful APIs implementing OAuth2 and JWT for authentication, ensuring robust security across distributed microservices. Optimized database interactions by leveraging PostgreSQL with advanced ORM indexing strategies in Django and raw SQL execution in FastAPI for critical performance paths.
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## TECHNICAL KNOWLEDGE:

- Languages: Java, Python, Kotlin, SQL, JavaScript, TypeScript, Shell Scripting.
  - Frameworks & Libraries: Spring Boot, Spring MVC, Hibernate/JPA, FastAPI, Flask, Node.js, Express, Ruby on Rails, React, Angular, JUnit, Mockito, TensorFlow.
  - Cloud & DevOps: AWS (EC2, Lambda, S3, RDS, CloudFormation), Azure, GCP, Terraform, Kubernetes, Docker, Jenkins, Ansible, Helm, GitlabCI.
  - Databases & Caching: MySQL, PostgreSQL, MongoDB, Cassandra, DynamoDB, Snowflake, Redis, Supabase.
  - System Design & Messaging: Microservices, Distributed Systems, Kafka, RabbitMQ, OAuth2, JWT.
  - Observability & Tools: Grafana, Prometheus, ELK Stack (Elasticsearch, Logstash, Kibana), Datadog, Splunk, Git.
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## Certifications:

- Oracle Java SE 8 Programmer
  - Microsoft Azure AI Engineer Associate (ai102)
  - Microsoft Azure Fundamentals (az900)
  - Microsoft Azure AI Fundamentals (ai900)
  - AWS Certified Solutions Architect – Associate
  - AWS Certified AI Practitioner
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## Education:

**University of North Carolina at Charlotte:** Master's in computer science. (*Jan 2021 – May 2022*)

**Vellore Institute of Technology:** Bachelor of Technology in Computer Science (*July 2014 – May 2018*)