Sohith Kampalli

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PROFESSIONAL SUMMARY

Full-Stack & Cloud Engineer **specializing in** scalable web and cloud applications **with expertise in** AWS, GCP, and Kubernetes (KCNA Certified)**. Skilled in** building and deploying high-performance APIs, containerized microservices (Docker, Kubernetes), and cloud-native architectures**. Experienced in** backend optimization, CI/CD automation, and full-stack development using Next.js, Node.js, and Prisma**.**

WORK EXPERIENCE

University of North Texas – Software Engineer (Part-Time)   Aug 2024 – Present

- Optimized Eagle Connect, integrating AWS, GCP, and Azure AD, reducing latency by 30% and improving multi-cloud scalability.
- Developed & optimized REST APIs with Spring Boot & Node.js, implementing Redis caching and load balancing, reducing API response time by 25%.
- Enhanced database performance by optimizing PostgreSQL & DynamoDB queries, cutting retrieval time by 20%.
- Implemented MFA & IAM policies, reducing security incidents by 30% and strengthening role-based access control (RBAC).
- Automated CI/CD pipelines with Jenkins, Docker, and Kubernetes, achieving zero-downtime deployments and improving developer efficiency by 40%.

University of North Texas – Graduate Teaching Assistant   Jan 2024 – Jul 2024

- Led cryptographic security & payment gateway workshops for 100+ students, guiding them in secure API integration (Stripe, PayPal) and OAuth authentication.
- Evaluated assignments using industry security frameworks (ISO 27001, NIST, OWASP), ensuring real-world compliance.
- Mentored students in implementing secure APIs & payment gateways, strengthening their cybersecurity engineering skills.
- Integrated real-world cybersecurity case studies, bridging academic knowledge with modern security protocols.

Persistent Systems – Software Engineer Intern   Aug 2022 – June 2023

- Optimized Java applications using multithreading & caching, improving execution speed by 30% and scalability under high workloads.
- Designed & built RESTful APIs with Spring Boot & Hibernate, enhancing database interaction and data retrieval efficiency.
- Implemented CI/CD pipelines with Jenkins, Docker, and Kubernetes, enabling automated deployment and reducing rollback time by 50%.
- Conducted unit testing with JUnit & Mockito, achieving 95%+ test coverage and reducing production bugs by 35%.
- Improved server response time by 25% using Redis caching & horizontal scaling techniques.

PROJECTS

AI Career Coach – Full-Stack AI-Powered Job Assistant | Deployed on Vercel

- Developed an AI-driven career assistant, integrating Gemini AI & OpenAI for resume generation, cover letter writing, and job market insights.
- Built scalable APIs using Next.js Server Actions, optimizing AI response time by 40% with rate-limiting & caching.
- Implemented real-time AI chat using WebSockets, providing instant career feedback.
- Secured user authentication with Clerk (OAuth, JWT, RBAC), ensuring data privacy & role-based access control.
- Automated job market insights with Inngest background jobs, reducing manual research efforts by 60%.

AI Finance Platform (Wealth) – AI-Powered Financial Management | Deployed on Vercel

- Developed an AI-powered receipt scanner, using Gemini AI to extract transaction details, reducing manual entry time by 60%.
- Designed & optimized financial transactions database with PostgreSQL (Supabase) & Prisma ORM, improving query efficiency by 40%.
- Automated budget tracking with Inngest (background job scheduling) and real-time email alerts (Resend API).
- Implemented API rate-limiting with Arcjet, ensuring secure financial transactions & stability under high loads.
- Built a financial analytics dashboard with interactive charts & spending trends using Power BI & Recharts.

Data Visualization Dashboard – API-Driven Job & Finance Analytics

- Developing an API-driven dashboard for job market trends & financial analytics, integrating real-time insights.
- Designing predictive job demand models using AWS Lambda & PostgreSQL, automating data updates.
- Optimizing SQL queries & indexing, improving query execution time by 40%.
- Building REST APIs to feed real-time insights into Power BI & Tableau dashboards.

AI-Powered Code Review & Optimization Platform | Built with Next.js, AWS Lambda, Docker, Kubernetes

- Developed an AI-driven code review system, integrating Gemini AI for performance & security analysis.
- Built secure APIs that analyze GitHub PRs & suggest AI-powered optimizations, reducing manual review time by 60%.
- Automated security scans for vulnerabilities & best practices, improving code quality & compliance.
- Deployed via Docker & Kubernetes, ensuring scalability for large-scale repositories.
- Implemented CI/CD pipelines with GitHub Actions, achieving continuous testing & zero-downtime deployments.

CERTIFICATIONS

- AWS Developer Associate (AWS)
- AWS Data Engineer Associate (AWS)
- Google Professional Data Analytics (Coursera)
- KCNA (Kubernetes & Cloud Native Associate -The Linux Foundation)
- Docker Foundations (LinkedIn)

SKILLS

Programming: Python, Java, JavaScript, TypeScript, SQL
Web Development: Node.js, Express.js, Spring Boot, React.js, Next.js, Tailwind CSS
Cloud & DevOps: AWS (Lambda, EC2, S3), GCP, Docker, Kubernetes, Terraform, Jenkins
AI & Data Engineering: OpenAI API, Gemini AI, PostgreSQL, MongoDB, Power BI, Tableau
Security & Optimization: OAuth, JWT, Redis Caching, API Rate Limiting, CI/CD Pipelines

EDUCATION

University of North Texas, Texas, United States   **Aug 2023 – May 2025**

Master of Science in Computer and Information Sciences   **CGPA 3.88**

- Coursework: Fundamentals of Database, Software Engineering, Computer Algorithm, Big Data, Data Visualization, Secure E-Commerce, Computer System Architecture.