Sai Nithin Goud K

San Francisco,CA | +1(513)764-1000 | sainithingoudk@gmail.com | LinkedIn | GitHub | Portfolio

SUMMARY

Software Development Engineer skilled in full-stack development, cloud-native systems, and scalable microservices. Proficient in Python, Java, React, and AWS, with a track record of building responsive applications and high-performance REST APIs. Strong foundation in algorithms, data structures, and object-oriented design.Passionate in delivering innovative, user-centric software solutions, with emphasis on scalability, clean architecture, and system performance.

TECHNICAL SKILLS

- **Programming Languages**: Python, Java, JavaScript, C++, C, SQL, TypeScript
- **Frameworks and Libraries**: React, Django, Flask, FastAPI, Spring Boot, Node.js, Tailwind CSS
- **Databases**: PostgreSQL, MySQL, MongoDB
- **Cloud and DevOps**: AWS (EC2, S3, Lambda), Docker, Kubernetes, CI/CD Pipelines, Jenkins, Kafka
- **Development Tools**: Git, GitHub, GitLab, Visual Studio Code, Postman
- **Software Development**: Algorithms, Data Structures, REST APIs, Microservices, Machine Learning, LLMs

EXPERIENCE

Sky InfoLab Software Solutions   Jan 2024 - Jun 2024
Software Engineer   *India*
- Engineered scalable web applications with Python/Django, implementing modular architecture that improved maintainability and reduced response times by ~30%.
- Architected and optimized RESTful APIs, applying caching and query optimization that reduced API latency by 25% and improved throughput under peak loads.
- Built and deployed scalable backend APIs serving thousands of requests/day with <200ms latency.
- Developed responsive React UIs with async data fetching and state management, reducing page load times by 20% and boosting user engagement.
- Implemented optimized PostgreSQL and MongoDB architectures with indexing and partitioning, cutting query execution time by 35%.
- Collaborated with cross-functional teams in an Agile environment to debug production issues and utilized Git and CI/CD pipelines for seamless version control and automated deployments, improving deployment efficiency and reducing downtime

PROJECTS

E-commerce & Real-Time Analytics Platform
- Developed a microservices-based marketplace (auth, catalog, cart, orders, payments) secured with JWT and RBAC behind an API gateway, supporting REST + GraphQL and scaling to 5K+ concurrent users.
- Engineered Kafka topics for orders, payments, and inventory using back-pressure and partition-affinity strategies, delivering a 40% improvement in benchmark throughput under peak load.
- Built a graph-based recommendation system with caching, cutting stock mismatches and boosting conversions.
- Established robust CI/CD pipelines using Jenkins and Terraform for automated ECR builds and EKS rolling deployments.
- Optimized Stripe webhook handlers with retry + DLQ, ensuring exactly-once order state transitions and eliminating duplicate charges, improving payment reliability by 100%.

AI-Powered Resume Evaluator
- Scaled to 1K resumes/min using auto-scaling Flask APIs with queue-based load balancing
- Multi-agent LLM pipeline scoring candidates 0-100 with tags/summaries; 92% match to human shortlists.
- Persisted results in MySQL with idempotent job IDs; built Flask API + React dashboard for search, filters, and exports.

DDoS Detection
- Designed pipeline: parsing & cleaning flow features (80+), scaling, feature selection, and SMOTE for imbalance.
- Trained RF/XGBoost ensemble to 98%+ F1; tracked ROC-AUC, precision/recall; threshold tuning per attack type.
- Packaged the model as a reproducible scikit-learn Pipeline with versioned artifacts; deployed in shadow mode to compare against baseline traffic before enforcing blocks.

MoneyScale – Smart Finance Management App
- Designed AI-powered budgeting with time-series forecasting algorithms, improving expense trend accuracy.
- OAuth2 auth, encrypted secrets, and row-level scoping; PostgreSQL with indexed queries and materialized views.
- Serverless + EC2 hybrid: Lambdas for ingestion/ETL, EC2 for the API; S3 for receipts/exports; background jobs for re-categorization.

EDUCATION

University of Cincinnati   Aug 2024 - Dec 2025
Master's, Computer Science
- **Coursework:** Algorithms & Data Structures, Distributed Systems, Web/Cloud Computing, Database Systems, Machine Learning