SREE KOHALI

+1(401) 300-4448 | sreekohalip@gmail.com | Github

SUMMARY

Software Development Engineer (M.S. CS) experienced in designing and operating **scalable backend services and distributed cloud systems** using **Python, Java, TypeScript, and AWS**. Strong foundation in data structures, APIs, and system design with hands-on ownership of services from **design through deployment, monitoring, and production support**. Passionate about building reliable, high-impact systems that solve real customer problems at scale.

TECHNICAL SKILLS

Languages: Python, Java, Go, TypeScript, JavaScript
Backend: REST APIs, Microservices, Distributed Systems, Spring Boot, Fast API, Node.js
Cloud: AWS (Lambda, EC2, S3, DynamoDB, CloudWatch, API Gateway), Docker, Kubernetes
Data: MongoDB, PostgreSQL, Snowflake, MySQL, Redis
Frontend: React, Next.js, Angular
DevOps: GitHub Actions, CI/CD, Monitoring/logging, Automation
Others: System Design, cloud deployment, API Design, Data Structures, OOP

EXPERIENCE

Software Development engineer   **Shark Analytics | June 2025 -Present**

Owned development of backend automation and orchestration services supporting 100+ lab systems **and internal users.**

- Built **event-driven backend systems** using asynchronous processing and retry mechanisms, improving system resilience and reducing failure rates
- Developed and optimized REST APIs handling concurrent requests, reducing average response latency by **30%+**
- Participated in **on-call rotations**, debugging production issues and performing root cause analysis to improve long-term system reliability
- Improved deployment safety by building **CI/CD pipelines** with automated tests, canary deployments, and rollback strategies

Software Developer – Automation & Backend Systems (Campus role)   **UNT | April 2024- May 2025**

Built backend data processing and automation systems to improve operational efficiency.

- Automated payroll and scheduling workflows using Python, reducing operational errors by 8% and generating $12K/year in cost savings.
- Designed and implemented fault-tolerant ETL pipelines with scheduling, logging, and monitoring to ensure reliable data processing.
- Designed and built **Python-based backend automation services** integrating internal databases and REST APIs, eliminating **10+ hours/week** of manual operational work.
- Optimized data processing workflows using efficient data structures and batch processing, improving overall throughput.

PROJECTS

Expense Tracker with Visual Insights | *React, Node.js, MongoDB, AWS*   **March 2025**

- Architected a scalable backend service handling 10K+ monthly read/write operations using optimized MongoDB queries and stateless APIs.
- Implemented JWT-based authentication and caching, reducing average login latency from 280ms to 90ms.
- Implemented logging, metrics, and alerting via CloudWatch, reducing debugging time during failures.

Accessible Weather Alert System | *Node.js, React, AWS, WebSocket's*   **March 2024**

- Designed and deployed a cloud-native microservices architecture delivering real-time, geo-targeted weather alerts.
- Implemented WebSocket-based push notifications with <150ms latency for critical alerts.
- opted a WCAG 2.2-compliant weather alert system using MERN stack, delivering real-time location-based alerts to over 500 users through user authentication and multi-channel notifications (email, SMS, push) for alerts.

Social Media Sentiment Analyzer | *Fast API, NLP (BERT/VADER), Docker*   **December 2024**

- Built a backend service performing real-time sentiment analysis on social data using BERT and VADER models.
- Deployed containerized services using Docker, supporting thousands of daily API requests with consistent latency.
- Designed time-series sentiment visualizations and topic-level filtering for actionable insights.

EDUCATION

University of North Texas   Master of Science in Computer Science   **August 2023 - May 2025 | GPA: 3.7/4.0**
Relevant coursework- Data Structures, Machine Learning, Algorithms, Software Engineering, Artificial Intelligence.