Siman Shrestha

Austin, Texas | siman4457@gmail.com | (469) 323-7640 | View LinkedIn | View Portfolio

Software Engineer

Skilled Software Engineer with 4 years of experience specializing in building backend services and web user interfaces. Experienced in designing APIs and architecting applications that support millions of users. Adept at designing and building intuitive user interfaces with industry-standard frameworks. Proficient in capturing metrics and utilizing observability tools for debugging, monitoring, and alerting.

Fullstack Web Development | Observability | Integration and Unit Testing | AWS | Data Modeling | API Design | Caching Event-Driven Architecture | Continuous Integration/Continuous Delivery (CI/CD) | Agile Development | Communication

TECHNICAL COMPETENCIES

Languages & Frameworks: TypeScript, JavaScript, Python, Java, NestJS, Node.js, React, Angular, Django, Spring Boot Databases: PostgreSQL, MySQL, MongoDB, Redis

Tools & Technologies: Git, Kafka, GraphQL, REST, Sumo Logic, DataDog, Sentry, Bull Queue, Linux, Docker, Kubernetes AI: GitHub Copilot, Chat GPT

UI/UX: Figma, D3, Adobe XD, Adobe Illustrator, Adobe Premiere Pro

EXPERIENCE

Hinge Health | Austin, TX

Aug 2023 – Apr 2024

Software Engineer II

Maintained critical REST-based microservices handling personally identifiable information data for 30 million users at the leading digital musculoskeletal therapy clinic.

- Led a project to refactor a tightly coupled architecture. Cut event ingestion processing time by 40%, eliminated 1 million HTTP calls daily, and enhanced security by implementing AWS KMS encryption for Kafka messages.
- Supported decomposition of a monolithic Rails architecture into a microservice to process and serve PII data for 30 million users. Utilized TypeScript, NestJS, and PostgreSQL to develop REST API endpoints.
- Led a hackathon team that delivered a production-ready proof-of-concept for envelope encryption of Kafka messages, eliminating 100 million monthly HTTP calls, saving ~100 days of execution time, and \$600 per month.
- Elevated code quality and deployment stability through a comprehensive overhaul of integration test suites.
- Leveraged observability tools such as Sumo Logic, DataDog, and Sentry for debugging, alerting, and monitoring.
- Participated in team rituals including code reviews, technical design reviews, retrospectives, and sprint planning.

Visa | Austin, TX Jan 2022 – Aug 2023

Senior Fullstack Software Engineer - Observability

Expanded observability capabilities for operations and infrastructure teams across the org in a remote, distributed team.

- Implemented real-time, API health monitoring dashboard for critical production API metrics with React, Node.js, Redis, and GraphQL. Used daily by the Product Reliability Engineering team.
- Led the development of a self-service platform to automate updates for a real-time monitoring dashboard. Prototyped UI with Figma and designed API integrations, reducing work for the observability team by 10 hours per month.
- Optimized application load from 10 MB to 10 KB per request by caching metrics in Redis and using WebSockets to broadcast data to subscribers.
- Enabled 500+ engineers to generate key metrics and alerts for app servers by maintaining an in-house Observability web application built with React, Node (Express), GraphQL, MongoDB, and MySQL.
- Deployed Grafana with an improved authentication architecture in a distributed environment, used by 1000 engineers.
- Mentored interns and provided technical guidance for summer projects.

Visa | Austin, TX Oct 2020 – Jan 2022

Fullstack Software Engineer – Middleware

Developed a platform for Visa engineers to schedule asynchronous jobs.

- Automated remote job execution on targeted private servers saving engineers 10 hours per week. Accomplished by building a web application with Angular, D3, Java Spring Boot, Python, Kafka, Quartz, and MySQL.
- Implemented real-time log output for remote job executions.
- Designed and implemented a responsive UI using Figma and Angular for a private container deployment platform.

Frogslayer | College Station

Sep 2019 - May 2020

Junior Software Engineer

Maintained a cloud-based medical record system web application as the primary engineer.

- Delivered features for a web application utilized daily by 100+ medical personnel across three urgent care facilities. Constructed with Angular, MariaDB, and Django (Python).
- Designed UI components in Adobe XD, presented designs to stakeholders and implemented in Angular.

CERTIFICATIONS

Academy Accreditation - Generative AI Fundamentals Databricks

May 2024

EDUCATION

Texas A&M University, College Station, TX

Aug 2016 – May 2020

Bachelor of Science in Computer Science, Minor in Graphic Design

LEADERSHIP

• Lead Communications and Engagement Chair, Visa Young Professionals ERG

Dec 2020 – Aug 2023

• Speaker for informational and social events to encourage networking amongst 500 members.