Siman Shrestha

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

Software Engineer

Dedicated Software Engineer with a passion for building high-scale, secure, and observable software. Demonstrated success spearheading innovative solutions in health tech and fintech. Proven track record of optimizing performance, enhancing security, and streamlining processes. Adept at decomposing monolithic architectures into efficient microservice ecosystems, serving millions of users seamlessly. Experienced in utilizing observability tools for debugging, monitoring, and alerting, ensuring system reliability and availability.

Microservices Architecture | Health Tech Innovation | Observability | Integration and Unit Testing
Performance Optimization | Decomposing Monolithic Architectures | API Design | API Security | Caching
Continuous Integration/Continuous Delivery (CI/CD) | Remote Collaboration | Back-End Development
Front-End Development | Application Design & Deployment

Professional Experience

Hinge Health | Austin, TX | Aug 2023 – Apr 2024
Software Engineer II
Maintained microservices handling customer PII data, collaborating within a remote, distributed team at the forefront of musculoskeletal therapy in health tech innovation.
- Spearheaded a project that slashed event ingestion processing time by 40%, eliminated 500,000 daily HTTP calls, and fortified security by implementing AWS KMS encryption for Kafka messages.
- Led a hackathon team that successfully delivered a production-ready proof-of-concept for envelope encryption of Kafka messages, eliminating 1 million HTTP calls daily across the organization.
- Supported the decomposition of a monolithic Rails architecture into a NestJS microservice to handle PII data for 10 million users.
- Used observability tools like Sumo Logic, DataDog, and Sentry to streamline debugging, alerting, and monitoring.
- Elevated code quality and deployment stability through a comprehensive overhaul of integration test suites.
- Improved app infrastructure and performance by implementing a Redis-backed Bull Queue for asynchronous processing of heavy tasks.
- Maintained on-call duties to ensure system uptime and address critical issues.

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 for critical production metrics, used by over 100 engineers in the command center, leveraging tools that included React, Node (Express), Redis, GraphQL
- Reduced application load by 5x by caching metrics in Redis and using WebSockets to broadcast frequent updates.
- Enabled 500+ engineers to generate key metrics and alerts for their app servers by maintaining an in-house Observability web application. Tools used included React, Node (Express), GraphQL, MongoDB, MySQL.
- Deployed Grafana with an improved authentication architecture in a distributed environment, used by 1000 engineers to monitor API health, leveraging Linux and ForgeRock.
- Designed a self-service platform to automate updates to a real-time monitoring dashboard. Reduced workload for the observability team by 10 hours per month.
- Mentored interns and provided technical guidance for their summer projects.

Fullstack Software Engineer – Middleware | Austin, TX | Oct 2020 – Jan 2022
Developed a platform for Visa engineers to schedule asynchronous jobs.
- Reduced time to execution for firing asynchronous jobs by 4x by building a web application with Angular, D3, Spring, Kafka, Quartz, and MySQL. Used daily by 100+ engineers to automate the execution and deployment of scheduled jobs with log reports.
- Built a responsive UI with Angular for a container deployment self-service platform.

Frogslayer | College Station | Sept 2019 - May 2020
Junior Software Engineer
Primary developer for a cloud-based medical record system web application.
- Maintained and delivered features for a web application utilized daily by 100+ medical personnel across 3 distinct urgent care facilities. Used a wide range of tools, including Angular, MariaDB, and Django.
- Designed UI components in Adobe XD, presented them to stakeholders, and implemented them in Angular.

Education & Professional Development

EDUCATION

Texas A&M University, College Station, TX
Bachelor of Science in Computer Science, Minor in Graphic Design, May 2020

LEADERSHIP

- Lead Communications and Engagement Chair, Visa Young Professionals ERG, Dec 2020 - Aug 2023
  o Speaker for informational and social events that encourage networking amongst 500 members.

Technical Competencies

Languages & Frameworks: NestJS, React, Node.js (Express), Angular, Django, Spring
Databases: PostgreSQL, MySQL, MongoDB
Tools & Technologies: Git, Kafka, Redis, GraphQL, REST, Sumo Logic, DataDog, Sentry, Bull Queue, Grafana, Linux
UI/UX: D3, Figma, Adobe XD, Adobe Illustrator, Adobe Premiere Pro