Siman Shrestha

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

Software Engineer

Dedicated Software Engineer passionate about building scalable, highly available, and observable software. Proven track record of optimizing API response times, improving code quality, and delivering critical features. Experienced in architecting intricate microservice landscapes from monolithic structures, seamlessly accommodating millions of users, while also adept at building intuitive user interfaces. Experienced in capturing metrics and utilizing observability tools for debugging, monitoring, and alerting, ensuring system reliability and availability.

Microservices Architecture | Health Tech Innovation | Observability | Integration and Unit Testing | AWS
Performance Optimization | Decomposing Monolithic Architectures | API Design | API Security | Caching
Continuous Integration/Continuous Delivery (CI/CD) | Event Driven Architecture | Back-End Development
Front-End Development | UI and UX Design | Agile Development | Communication | Remote Collaboration

TECHNICAL COMPETENCIES

Languages & Frameworks: NestJS, Node.js, Express, React, Angular, Django, Spring Boot, TypeScript, JavaScript, Python, Java
Databases: PostgreSQL, MySQL, MongoDB, Redis
Tools & Technologies: Git, Kafka, GraphQL, REST, Sumo Logic, DataDog, Sentry, Bull Queue, Grafana, Linux, Docker, Kubernetes, Apache Airflow
AI: GitHub Copilot, Chat GPT
UI/UX: D3, Figma, 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 PII data for 30 million users, 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 1 million HTTP calls daily, and fortified security by implementing AWS KMS encryption for Kafka messages.
- Led a hackathon team and delivered a production-ready proof-of-concept for envelope encryption of Kafka messages, eliminating 3 million HTTP calls daily across the organization and reducing costs by .
- Supported decomposition of a monolithic Rails architecture into a scalable microservice to process and serve PII data for 30 million users. Utilized TypeScript, NestJS, and PostgreSQL to develop REST API endpoints.
- Leveraged observability tools such as Sumo Logic, DataDog, and Sentry for 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.
- Fulfilled on-call duties to ensure system uptime and address critical issues.

Visa | Austin, TX   Oct 2020 – Aug 2023
Senior Fullstack Software Engineer - Observability   Jan 2022 – Aug 2023
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 metrics with React, Node.js, Redis, and GraphQL. Used daily by over 100 command center engineers.
- Reduced application load by 5x by caching metrics in Redis and used WebSockets to broadcast frequent updates.
- 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 to monitor API health.
- Designed a self-service platform to automate updates to a real-time monitoring dashboard. Cut down workload for the observability team by 10 hours per month.
- Mentored interns and provided technical guidance for summer projects.

Fullstack Software Engineer – Middleware   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 Boot, Kafka, Quartz, and MySQL. Used daily by 100+ engineers to automate 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   Sep 2019 – May 2020
Junior Software Engineer
Developed as the primary engineer 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. Constructed with Angular, MariaDB, and Django.
- Designed UI components in Adobe XD, presented designs to stakeholders and implemented in Angular.

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.