Siman Shrestha

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Software Engineer

Dedicated Software Engineer with a passion for building scalable, secure, and observable software. Demonstrated success spearheading innovative solutions in health tech and fintech. Proven track record of optimizing performance, improving code quality, 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) | 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
UI/UX: D3, Figma, Adobe XD, Adobe Illustrator, Adobe Premiere Pro

EXPERIENCE

Hinge Health | Austin, TX   Aug 2023 – Apr 2024
Software Engineer II
Built critical 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, slashing event ingestion processing time by 40%, eliminating 1 million HTTP calls, and fortifying 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.
- Supported decomposition of a monolithic Rails architecture into a scalable microservice to handle PII data for 30 million users. Developed using NestJS and PostgreSQL to expose 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   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 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 observability team by 10 hours per month.
- Mentored interns and provided technical guidance for summer projects.

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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, 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.
- Maintaned 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.