GAYATHRI SURESH

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Backend Engineer with 4 years of experience building high-scale, data-rich distributed systems in Go. Expert in optimizing database performance, processing high-volume event streams, and architecting microservices that handle millions of requests. Reduced P99 latency by 28% and increased throughput by 45% through strategic data processing optimizations. Strong background in CI/CD pipelines, containerized deployments, and maintaining 99.9% SLO for mission-critical services.

TECHNICAL SKILLS

Languages: Go (4 years), TypeScript, C#, Python, Java, C++ | **Databases(SQL/NoSQL):** MongoDB, BadgerDB, PostgreSQL, VectorDB

Frameworks: Atreugo, GoGin, GoFiber, React, Electron, .NET | **DevOps:** Docker, Kubernetes, GitHub Actions, CI/CD, Nginx

Monitoring: Prometheus, Grafana, System Performance Analysis, DataDog | **Cloud:** AWS, Containerized Environments

Specialties: Shell Scripting, Husky, Distributed Systems, High-Scale Data Processing, Performance Optimization, Microservices, Event-Driven Architecture, TDD, Agentic AI | **Communication Protocols:** gRPC, REST, Webhooks, Message Queues, Event Sourcing

PROFESSIONAL EXPERIENCE

Software Engineer, LoginRadius *Apr 2024 – Dec 2024*

- Architected and deployed Go microservices handling millions of authentication events daily, migrating from C# using Strangler Fig pattern to achieve 28% P99 latency reduction and 14% infrastructure cost savings with zero downtime
- Built high-throughput request handlers using Atreugo framework, optimizing data processing pipelines with fastpbkdf2 and json-iter to reduce CPU load on hot paths and improve system performance by 15%
- Designed and implemented GDPR-compliant REST APIs with MongoDB backend, maintaining P95 latency of 140ms, <0.2% error rate, and 99.9% SLO through strategic database query optimization and indexing
- Established comprehensive CI/CD pipelines with GitHub Actions and Testcontainers for automated testing, reducing flaky tests by 61% and environment drift bugs by 47% while ensuring code quality through spectral linting
- Collaborated with Product and UX teams to build AI-powered Technical Support Engine using vector databases (Pinecone), processing documentation queries and reducing support ticket resolution time by 35%
- Deployed and monitored containerized services on Kubernetes with Nginx load balancing, implementing health checks and graceful shutdown patterns to ensure high availability

Software Developer, CyLogic *Mar 2023 – Mar 2024*

- Architected high-performance data processing pipelines in Go using chunking and batching strategies to handle large-scale file operations, increasing system throughput by 45% and reducing P95 read latency by 50%
- Developed distributed file synchronization system with BadgerDB for state management, implementing robust offline handling and conflict-resolution protocols that reduced data inconsistency bugs by 80%
- Optimized database queries and implemented efficient data models to improve P99 response times by 35%, enhancing system reliability across network states
- Maintained 100% backward compatibility across releases through TDD practices and comprehensive integration testing, enabling continuous deployment without service disruption

Software Engineering Intern, Axiom IO *Apr 2022 – Mar 2023*

- Built NFT marketplace backend with Solidity smart contracts, handling transaction processing and wallet integration that drove 50% increase in platform usage

OPEN SOURCE PROJECTS

Grid-Scale F1: 2D Racing Simulation Engine | *Go, Concurrent Programming*

- Engineered high-performance event-driven simulation engine processing real-time telemetry data using Goroutines and Channels, achieving sub-10ms frame rendering through optimized memory management and concurrent state synchronization

Distributed Chaos Engineering Framework | *Go, Systems Testing*

- Built fault-injection framework for stress-testing distributed systems, simulating network failures, latency spikes, and deadlock scenarios to validate system reliability and resilience

EDUCATION

BTech in Computer Science and Engineering, NSRIT | CGPA: 8.34/10 | Aug 2019 – Sep 2023