Gayathri Suresh

SOFTWARE ENGINEER

Objective

Result-oriented Backend Engineer and MBA candidate with ~4 years of experience scaling **distributed microservices in Go**. Deeply rooted in engineering fundamentals, I specialize in **concurrency, state management, and performance optimization**. I believe that the best systems are built on **curiosity and simplicity**, and I am committed to designing high-impact infrastructure that is as robust as it is efficient.

Employment History

Software Engineer, LoginRadius

APR 2024 — DEC 2025

- **Architected an AI-powered Technical Support Engine** integrated into the admin dashboard, utilized an **MCP (Model Context Protocol) server** for logic and **Pinecone** as vector databases to automate documentation-based query resolution and ticket generation via **OpenAI Ada-002 embeddings**.
- **Migrated legacy Consent Management APIs to a dedicated microservice-** , adding tenant-specific configurations for consent forms and privacy policies, developed a tracking UI for form archival/deletion and engineered **GDPR-compliant APIs** to ensure data privacy.
- **Stabilized the authentication lifecycle** by resolving critical architectural bugs in cloud configuration and **webhook synchronization**, ensuring reliable event delivery for MFA, Social Login, and custom consent flows.
- **Pioneered the API migration from C# to Go,** authored the initial codebase and established **OpenAPI specifications** for all services to enforce contract-driven development and improve inter-team communication.
- **Optimized high-throughput request handlers** using the **Atreugo** framework, benchmarked and implemented fastpbkdf2 and json-iter, contributing to a **28% reduction in P99 latency** and a **14% decrease in infrastructure costs**.
- **Hardened system reliability** by integrating Testcontainers, spectral linting in GitHub Actions CI/CD pipelines, maintaining a **99.9% SLO** for mission-critical identity services.

Technologies: Golang, MongoDB, Postman, Node.js, React, TypeScript, .NET, Nginx

Software Developer, CyLogic

MAR 2023 — MAR 2024

- **Optimized backend I/O performance** via data chunking and batching strategies, increasing system throughput by **45%** and reducing **Read P95 latency by 50%**, significantly lowering operational costs.
- **Engineered a virtual file system for CyDrive** (Electron-based desktop application) by leveraging **WinFsp** to handle native OS-level file operations, achieved a **35% improvement in P99 response stability** across local and network share states.
- **Architected a robust offline state management system** to maintain data integrity for file CRUD operations (Read/Write/Rename) during network disruptions, ensuring seamless synchronization upon reconnection.
- **Resolved complex version history edge cases** for group-based shared files, implementing a conflict-resolution protocol that reduced data inconsistency bugs by **80%** and decreased support tickets by **50%.**
- **Maintained 100% backward compatibility** across major releases by applying **SOLID principles and TDD**, reducing technical debt in the core Go and C# synchronization modules.

Technologies: Golang, C#, TypeScript, Node.js, Electron, BadgerDB, Flutter.

Details

Hyderabad
India
9500655970
gayathrisuresh1505@gmail.com

Links

Linkedin
GitHub

Skills

- Golang
- Database & Storage
- Data Structures & Algorithms
- Test Driven Development
- CIAM
- Web Development
- JavaScript
- Python, Flask
- C++
- Java
- C# & .NET
- Git
- Microservices
- System Design
- Kubernetes
- Cloud Computing
- AI
- Task Management - JIRA

Software Engineering Intern, Axiom IO

APR 2022 — MAR 2023

- **Built an NFT Marketplace**, leveraging Solidity, MetaMask, OpenZeppelin, and Ganache, driving a **50% increase in user interactions and transactions**.

Open Source Contributions

Grid-Scale F1: 2D Racing Simulation Engine

DEC 2025 — PRESENT

- **Engineered a high-performance 2D grid-based racing engine** in Go, utilizing a terminal-based UI (TUI) to simulate real-time car movement and telemetry within a coordinated grid system.
- **Implemented a highly concurrent execution model** using **Goroutines and Channels** to manage independent AI racing agents, achieving thread-safe state synchronization and sub-10ms frame rendering.
- **Optimized memory usage and execution speed** by minimizing allocations in the simulation loop, ensuring stable performance across long-duration race scenarios.

Distributed Chaos Engineering Framework

DEC 2025 — PRESENT

- **Architected a custom fault-injection framework** designed to stress-test distributed systems by simulating real-world infrastructure failures and network instability.
- **Developed automated experiment modules** to inject specific failure modes, including **state-sync latency, process isolation failures, and deadlock scenarios**.

Education

MBA - Finance, Andhra University

JAN 2025

BTech, NSRIT

AUG 2019 — SEPT 2023