Goutham A R

argouthu8400@gmail.com | +91-8137040474| linkedIn | github | website

SKILLS

Languages: C++, Golang, C, Java, TypeScript, Python, C#, Zig
Frameworks/Libraries: React, Gin, Spring, Express, Qt, FastAPI, NestJs, ASP.Net
Databases: MySQL, PostgreSQL, MongoDB
Others: Kafka, Druid, Azure, Docker, Kubernetes, SignalR, Grafana, ECharts

WORK EXPERIENCE

ZERO PIXELS | SOFTWARE DEVELOPER   Ernakulam, Kerala | Sep 2023 – present

- Autonomous Engineering Workflows: Developed an autonomous AI system (AIDO) that eliminated manual coding tasks by automatically implementing changes from Azure DevOps work items through a multi agent orchestration engine, reducing average ticket resolution time.
- Re engineered Global Reporting & Delivery: Eliminated critical performance bottlenecks by transitioning synchronous reporting to an asynchronous background worker architecture, integrated a real time progressive download manager that reduced API response times to sub-second levels and solved the issue of "blind" downloads with live progress tracking and automatic retries.
- Resolved Production Data Inconsistency: Diagnosed and fixed a critical 30 second synchronisation lag in an asynchronous architecture that caused stale invoice data, restored system integrity to high accuracy and eliminated customer-reported discrepancies.
- Centralized Resource Intensive Tasks: Built a high concurrency Go server serving 20+ developers daily to offload heavy unit testing and SonarQube analysis from local machines, saving the engineering team local computation time and resources per build cycle.
- Scaled High Volume Data Processing: Engineered an Azure based pipeline with at least once processing guarantees to handle 200K+ daily messages, enabling real time cleansing and analysis of massive volumes of fragmented invoice data.

ZERO PIXELS | SOFTWARE DEVELOPER INTERN   Ernakulam, Kerala | May 2023 – Sep 2023

- Enhanced Real Time Messaging Performance: Optimised database query patterns and indexing for a high traffic messaging app, achieving a reduction in query response times and smoother real time user interactions.
- Integrated and maintained Agenda for background job processing, including patching a private fork due to upstream inactivity.
- Automated Manual Dashboards: Replaced static reporting with an interactive B2B dashboard, providing stakeholders with real time data visualizations and automated API integrations that reduced reporting cycle time from weekly to on-demand.

PERSONAL PROJECTS

- Programming Language (C++/Rust) – Designed and implemented a custom compiler and VM, later rewritten in Rust to explore memory safety and concurrency.
- Game Engine (C++, OpenGL) – Built a lightweight 3D engine with rendering, input handling, and physics modules, focusing on performance and modularity.
- Distributed Key Value Store (Go) - Implemented RAFT consensus for leader election and log replication, gained hands-on experience with fault tolerance and distributed coordination.

EDUCATION

B-Tech in Computer Science   Ernakulam, Kerala | 2019-23
MUTHOOT INSTITUTE OF TECHNOLOGY AND SCIENCE