

Sai Ramana P B

Software Engineer | DevOps & Full Stack

✉ sairamana.p.b@gmail.com [LinkedIn](#) [GitHub](#) ☎ +91 70193 87428

PROFESSIONAL SUMMARY

A software engineer passionate about blending tech with life's bigger picture. I thrive on full-stack adventures, crafting efficient backends in Go and Python while setting up solid cloud infrastructures with Kubernetes and Docker. Always chasing new resolutions, I love teaming up on impactful projects, from edge IoT innovations to quirky side builds such as game arcades—let's create something meaningful together!

TECHNICAL SKILLS

Languages: Go, Python, Java, TypeScript, JavaScript, SQL
Frontend: React, Astro, Tailwind CSS, Mantine.js
Backend: Quarkus, FastAPI, Hibernate ORM, PostgreSQL
DevOps & Cloud: Kubernetes, Docker, Helm, ArgoCD, AWS, Prometheus, Grafana
Tools: Git, GitHub, GitLab CI/CD, Linux, Typst

EXPERIENCE

Utthunga Technologies Bangalore, India

Software Engineer July 2025 - Present

- Manage highly available K3s clusters with MinIO, NATS, and Cerbos.
- Developed a Python reporting engine that automates daily fleet analytics (PDF/Excel), reducing manual reporting overhead by 100%.
- Orchestrated deployments for 10+ microservices using Helm and ArgoCD, ensuring seamless updates and rollback capabilities.

Associate Engineer Sep 2023 - June 2025

- Contributed to the 'IoT Platform SaaS' (Oil & Gas) platform by building RESTful microservices with Java Quarkus and Hibernate ORM.
- Developed high-impact UI dashboards using ReactJS, Mantine.js, and Echarts (radar charts, 3D visualizations).
- Integrated AI-driven forecasting models to serve real-time analytics using FastAPI and Streamlit.

Intern March 2023 - June 2023

- Built automations for reporting pipelines using FPDF2 and Python, eliminating manual data entry.
- Developed interactive data visualization dashboards with Streamlit and Plotly for sentiment analysis and image classification.
- Collaborated with senior engineers to implement real-time data processing pipelines using TensorFlow.

EDUCATION

PES University • *Master of Computer Applications*

Nov 2021 - May 2023
Bangalore, India

PROJECTS

VTS IoT Platform — Vehicle Tracking System

2025 - Present

Tech: Go, ReactJS, K3s, MinIO, NATS, Cerbos, Python

- ▶ Deployed a comprehensive vehicle tracking system providing real-time fleet insights and event analytics.
- ▶ Managed the K3s-based infrastructure using Helm, integrating reliable storage (MinIO) and event streaming (NATS).
- ▶ Implemented secure, policy-based access control for all services using Cerbos.

IoT Platform SaaS (Oil & Gas)

2023 - Present

Tech: React, Java Quarkus, Hibernate, K3s, Mantine, GenAI

- ▶ Created high-impact UI components (radar charts, 3D visualizations, JSON tables) with ReactJS, Mantine.js, and Echarts, delivering reusable, user-focused dashboards.
- ▶ Led deployments and optimized systems with Helm and Kubernetes, ensuring reliability, load balancing, and resource management.
- ▶ Built dynamic AI models for forecasting and classification via FastAPI, and developed knowledge graph tools with GenAI on Streamlit.
- ▶ Applied UI/UX design principles alongside DevOps practices (CI/CD, Docker, Kubernetes), FastAPI, GraphQL, data forecasting, and AI model lifecycle management.

IoT Platform Application on Edge Device

2025

Tech: Kubernetes, Docker, Traefik, MinIO, Redis, NATS, Mender, PostgreSQL, TimescaleDB, pg_cron, Kepware, WebSocket

- ▶ Deployment and conversion of IoT Platform on edge device, focusing on DevOps tasks to shift from Kubernetes to Docker-based setup for edge device management and data visualization.
- ▶ Converted existing Kubernetes-based IoT Platform deployment to a lightweight Docker setup for edge efficiency on Edge Devices
- ▶ Integrated and tested core components (Traefik for routing, MinIO for storage, Redis for caching, NATS for messaging) with local certificate generation
- ▶ Set up PostgreSQL TimescaleDB with pg_cron extension, created necessary schemas, and prepared for production deployment
- ▶ Packaged the entire application stack into a Mender-compatible artifact for OTA deployment to the edge devices
- ▶ Enabled real-time IIoT features: data ingestion from Kepware, dashboard visualization, WebSocket live updates, computes, and threshold-based alarm emails

Local Games Arcade

2025

Tech: Go, Chi Router, SQLite, JWT, React, Vite, TypeScript, Tailwind CSS, Framer Motion, Zustand, Bun, Docker, Trivy, zerolog

- ▶ A multi-game arcade with diverse gameplay mechanics, built using a modern full-stack development approach with Go and React.
- ▶ Focuses on security with JWT, PIN auth, and Trivy scanning, and features responsive UI with dark/light theme support and leaderboard functionality.
- ▶ Implemented shared authentication with secure PIN-based entry and JWT sessions.
- ▶ Developed a unified dashboard for game selection with a sleek, arcade-style interface.
- ▶ Ensured responsive design optimized for desktop and mobile devices.

Tech: Go, Cobra, Bubble Tea, Lipgloss, Beep, SQLite

- ▶ A fast, colorful CLI + TUI personal logging and time tracking tool enabling users to track work, notes, and timers directly from the terminal.
- ▶ Developed CLI commands for logging notes, managing timers, listing entries, and performing full-text search with highlights.
- ▶ Incorporated a TUI with a clean, resizable interface for browsing logs.
- ▶ Utilized SQLite for local storage and implemented configurable daily reminders, skipping holidays.