Suryamani Kumar

suryamani2spoj@gmail.com | +91-7320916511 | linkedin.com/in/suryamani-kumar | github.com/Suryamani123

Experience

Senior Software Engineer

MobileDrive Technology, Bengaluru

Apr 2024 - Present

- Led development for Vehicle HAL using C++, CAN, SOME/IP; Developed communication channels between vehicle signals and Vera OS applications (Amazon-based OS).
- Migrated conventional socket implementation to SOME/IP based tcp wrapper for ethernet management protocol and optimised Date time management Systemd service responsible for maintaining consistent time across Guest and host OSs.
- Implemented CPU and memory monitoring and health alerts that helped reduce screen freeze and crash issues; handled production diagnostics .
- Mentored engineers, reviewed PRDs, and owned features through deployment that has resulted in reducing backlogs by 30%.

Software Engineer 1

Harman International, Bengaluru

Mar 2023 - Apr 2024

- Developed ISO-compliant diagnostics modules in C++ and Java for embedded systems.
- Built cross-platform CMake scripts for Linux and QNX builds.
- Used Data Structures & Algorithms and design patterns for efficient module design and testing.

Associate Software Engineer

Harman International, Bengaluru

Oct 2020 - Mar 2023

- Owned middleware metadata modules; developed message passing using SOME/IP.
- Refactored C++ components with unit tests and static analysis.
- Collaborated with cross-teams to resolve blockers in workshop/debug modes.

Software Engineering Intern

Fungible Inc., Bengaluru

Jan 2020 - May 2020

- Built release milestone dashboard using Python, AngularJS, HTML/CSS/JS.
- Learned fundamentals of data-center architecture and storage.

Education

B.E. in Computer Science and Engineering

BIT Mesra

Jun 2020, CGPA: 7.98

Teaching Assistant: Introduction to Programming in C

Skills

Languages & Scripting: C++, Java, Python, JavaScript, HTML, CSS, Bash

Embedded & System Development: Embedded C++, Multithreading, Event-driven systems, Memory management, Diagnostics (ISO-compliant), IPC, Systemd services, Android Framework (Automotive), Crossplatform (QNX/Linux)

Build & Tools: CMake, Git, Gerrit, Jenkins, GDB, Static Analysis

Architecture & Design: OOP, Design Patterns (Factory, Singleton, Observer), DS & Algos, Middleware development, Fault tolerance, Refactoring

Methodologies: Agile, Scrum, CI/CD, PRD to production, Unit & Integration testing, Code reviews Soft Skills: Team leadership, Mentorship, Technical planning, Cross-functional communication