Afkar Ahamed

Software Engineer / System-Level Programmer

Summary

Aspiring software engineer with a background in C development and a strong desire to grow as a full stack developer. I am looking for a full-time role where I can contribute to meaningful projects, keep learning, and develop within an active engineering team, whether remote, hybrid, or on-site.

Experience

Software Engineer (Freelance)

Read For Life (Pvt) Ltd

May 2025 - Present — Colombo, Sri Lanka

- Collaborated with a local bookstore to develop a responsive, user-friendly e-commerce website from scratch.
- Built dynamic front-end interfaces using React and Tailwind CSS.

Software Engineer

ACCELR (Pvt) Ltd

Apr 2024 - Apr 2025 — Colombo, Sri Lanka

- Developed C software for POS terminals to handle real-time HTTP API communication.
- Integrated the app with external systems via HTTP API calls, handling JSON requests and server responses.
- Worked within memory-constrained embedded environments, ensuring reliability and performance.
- Created Java-based MQTT server, containerized with Docker for terminal-side communication.
- Ensured stable message delivery and accurate decision logic based on MQTT payloads from terminal-side sensors and conducted extensive testing and debugging.

Intern Software Engineer

ACCELR (Pvt) Ltd

Dec 2022 - Feb 2023 — Colombo, Sri Lanka

- Contributed to an internal R&D hardware project by writing logic modules in C as behavioral prototypes.
- Designed and simulated algorithmic logic structures to validate performance on sample input data.

Education

B.Sc. (Hons) in Electrical and Electronic Engineering

Sri Lanka Institute of Information Technology (SLIIT)

Graduated: Mar 2024 — Second Class Upper Division (GPA:3.65) — Malabe, Sri Lanka

G.C.E. Advanced Level (Physical Science)

Zahira College Colombo

Graduated: Aug 2017 — Colombo, Sri Lanka

G.C.E. Ordinary Level

MR/ Ilma College

Graduated: Dec 2014 — Matara, Sri Lanka

Projects

Embedded POS Terminal Integration (C, Java, Docker, MQTT)

Developed a C application for Linux-based POS terminals to handle real-time API communication. Parsed JSON server responses and implemented decision logic on-device. Built and deployed a Java MQTT server with Docker to support message-based terminal interactions.

Optimized performance for low-memory embedded environments.

Raspberry Pi GPU Inference Framework (C++, V3DLib)

Built a lightweight GPU-based inference engine for Raspberry Pi using the undocumented VideoCore VI GPU. Implemented custom GPU compute kernels for core deep learning ops (ReLU, GEMM, Log, etc.) using V3DLib. Wrote CPU equivalents and benchmarked execution speed.

Navigated lack of official GPU docs via reverse-engineering.

Task Manager Web App (HTML, CSS, JavaScript, OOP)

Built a fully functional web-based task manager using vanilla JavaScript. Supported add, delete, inline edit, priority badges, deadline alerts, and LocalStorage-based state persistence. Included light/dark theme and mobile responsiveness.

React Weather App (React, OpenWeatherMap API)

Responsive weather app fetching real-time data using OpenWeatherMap API. Used React hooks for state and lifecycle. Conditional rendering enabled dynamic UI updates.

Built modular UI components for scalability.

Next.js Blog with Authentication (Next.js, Node.js, Auth)

Full-stack blog platform using Next.js with user registration, login, and protected routes.

Task Management REST API (Node.js, Express)

RESTful API to support task creation, reading, updating, and deletion.

Skills

• HTML	• C / C++	• MySQL
• CSS	• React	• REST APIs
• JavaScript	• Node.js	• OOP
• Java	• Next.js	• Data Structures and Algorithms

Personal Skills

Leadership — Time Management — Self-Learner — Communication — Problem Solving

References

Available upon request.