Aadya

Aadya7696@gmail.com • +91 9078802121
LinkedIn • Bengaluru, India

Senior Software Engineer

Senior Software Engineer having strong technical and problem-solving skills with 5 years of experience in Software Development. Skilled in OOPs concepts, C++, Java, Data Structure, Android Framework, Windows, Linux, SELinux, Binders, Android NDK, Design Pattern, Gtest, C, UART, I2C, SPI. Demonstrated team collaboration, adeptness at rapid learning, and proficiency in debugging.

Areas of Expertise

Programming Languages: C++, C++ 11, Java
Technical Proficiencies: Android Framework, AOSP, HAL, AIDL, Adb, Linux, SELinux, Google Test, Android NDK, MISRA C, CERT C, UART, I2C, SPI, BLE, FreeRTOS basics, Data Structure
Software Engineering: Agile, Test-Driven, UML
Version Control: GIT, Tortoise SVN
Tools: JIRA, Polyspace R2020a, Confluence, TeraTerm, VisualStudio
Operating System: Windows, Linux

Professional Experience

Bosch Global Software Technologies Private Limited (BGSW).   08/2022 – Present
Senior Software Engineer – "SXM On AOSP" on an In-Vehicle Infotainment device
Client – Renault Nissan

Roles & Responsibilities: Middleware Developer

- Developed a diagnostic client, a Java-based APK, to provide diagnostic information and support firmware updates.
- Designed and implemented AIDL interface service for inter-process communication based on technical requirements.
- Development of C++ and Java based applications for a Linux based platform
- Contributed to the development of the HAL interface (in C++), providing essential services to the client's HAL to enable both background and foreground updates.
- Developed and built Android Native application which also communicates with another app through AIDL.
- Utilized adb for debugging and testing during the development phase.
- Written unit test codes using Google Test Framework (Gtest).
- Experience in building the project in Linux platform using Build script.
- Fixed multiple bugs and handle them based on the priorities decided by the management.
- Led the initiative on Background Firmware Update Topic
- Worked in an agile SDLC environment.
- Integration of OEM specific HAL with a third-party android application.
- Written SE Linux policies tailored to specific applications and services.
- Conducted policy analysis and debugging using tools like audit2allow, and adb logcat to identify and resolve SELinux denials.

L&T Technology Services (LTTS).   06/2019 – 07/2022
Software Engineer – Cummins C MISRA fix
Client – Cummins

Roles & Responsibilities: MISRA and CERT C Warning Fixes

- Conducted in-depth analysis of Cummins source code.
- Improved code quality of AUTOSAR-based systems by resolving MISRA and CERT C warnings, ensuring adherence to industry standards.
- Reviewed Team generated fixes.
- Learned MISRA C and CERT C guidelines.

Firmware Engineer –PX-Green Platform Development

Client – EATON

Roles & Responsibilities: Developed library for client's platform supporting functionality of BLE and Firmware Upgrade.

- Defined and developed libraries in C++ to support the functionality of the BLE module on Windows based platform.
- Utilized VBA scripting in Excel to streamline user management within the BLE module.
- Maintained comprehensive end-to-end testing documentation.
- Defined and developed libraries supporting Firmware Upgrade features.
- Provided crucial support to the team by debugging and testing Debug Manager feature.

Firmware Engineer – Elevator Platform Solution

Client – Thyssenkrupp

Roles & Responsibilities:

- Contributed to enhance power failure detection and reset cause detection.
- Formulated a robust communication protocol to facilitate seamless interaction between PC applications and peripheral boards.
- Designed, implemented and tested multiple test firmwares on Windows based platform for the Test Fixture used during the production phase of the project.
- Worked on driver development of various communication protocols including UART, I2C and SPI.
- Conducted unit, integration and system testing of firmware to ensure its readiness for release.
- Provided valuable support for firmware-related development and testing throughout the production phase.
- Provided support in managing FreeRTOS APIs, including assisting developers with API utilization, troubleshooting issues, and contributing to API documentation and usage guidelines.

Education

Bachelor of Technology in Electronics and Telecommunications – KIIT University, Bhubaneswar   2015   –   2019
Cumulative GPA: 8.0/10

Achievements

Received recognition from both customers and the Business Unit head for exceptional contributions and support during the challenging period of the COVID-induced team crisis in the BLE project.