Sudip Ghosh

+91-8388972014 | sudip9691@gmail.com | LinkedIn | Portfolio | LeetCode | Github

Profile Summary

Results-driven Software Engineer with **3.6 to years** of hands-on experience in **C/C++ development**, **embedded systems**, and **automotive software** design. Proven track record in delivering robust, production-ready solutions in **AUTOSAR**, ADAS, and autonomous driving domains. Strong foundation in **SDLC**, functional safety, and quality standards.

Professional Experience

Harman Connected Services Pvt. Ltd. April 2022 – Present
Project: VWN ID BUZZ AD 2.0 Automated Driving Functions
Role: C/C++ Developer-Automotive Embedded Software
Platform: Classic and Adaptive AUTOSAR Environment using C/C++
Tools: VS Code, WSL, GIT, Parasoft, Bitbucket, Unit Test using GTest, JIRA, EA, Code Beamer, CMake.
Description: Developing ASW for OEM modules in Volkswagen's ID. BUZZ autonomous series vehicle, enabling AD functions for data acquisition, consolidation, storage, relay, and reporting. Supported homologation of the first SAE Level 4 vehicle without a safety driver.
Roles & Responsibilities:

- Understanding System Requirement Analysis from Code Beamer.
- Led development for VWN's ID. BUZZ autonomous vehicle, focusing on the Vehicle Motion Control (VMC) and Ticket Inteface(TIF) feature of Autonomous Driving Functions (ADF)/ADAS using C/C++ in AUTOSAR SWC.
- Achieved 100% Code Coverage (including MCDC) using GTest.
- Addressed 100% MISRA Issues/Parasoft warnings and adhered to functional safety guidelines (ASPICE).
- Executed Low-Level Design (LLD) using the EA tool; engaged with architecture and clients for enhancements.
- Refactored code post-implementation to enhance quality.
- Contributed to critical releases and presented code reviews to clients.
- Bug Fixing: Testing team ticket fixing – Module: VMC and TIF.

Technical Skills

Programming Languages: C, C++(11,17,20), Java
Embedded Platforms: AUTOSAR (SWC Layer), ADAS, MISRA C/C++ Compliance
Real-Time OS & Embedded Systems: QNX, RTOS, Linux for automotive
Safety & Standards: ISO 26262 (Functional Safety), ASPICE process
Tools & Frameworks: VS Code, Eclipse, WSL, Git, Bitbucket, Parasoft, Google Test (GTest), Jenkins, CMake, Code Sonar
Design & Requirement Tools: Enterprise Architect (EA), CodeBeamer, JIRA
Technologies: SDLC, STLC, ASPICE, Functional Safety
Protocol: CAN
Web & Scripting: HTML, CSS
Database: MySQL
Operating Systems: Windows, Linux
Productivity Tools: MS Excel, SharePoint, PowerPoint, Word

Education

Bachelor of Technology (B.Tech.) in Electronics and Communication Engineering
Dr. B. C. Roy Engineering College, Durgapur, West Bengal — 2018 – 2022
GPA: 9.19 / 10

Awards & Achievements

- **BE BRILLIANT AWARD** recipient at Harman for outstanding contributions.
- Finalist in "To the Future & Beyond – Hackathon 3.0" at Harman.
- **5-star** HackerRank rating in **C++** and **Java**.