Sudip Ghosh

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

Profile Summary

Results-driven Software Engineer with **3.3 years** of hands-on experience in $\mathbf{C/C++}$ development, embedded systems, and automotive software design. Proven track record in delivering robust, production-ready solutions in $\mathbf{AUTOSAR}$, ADAS, and autonomous driving domains. Strong foundation in \mathbf{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: 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) feature of Autonomous Driving Functions (ADF)/ADAS using C/C++ in AUTOSAR SWC.
- Achieved 100% Code Coverage (including MCDC) using GTest.
- Addressed 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.

Technical Skills

Programming Languages: C, C++, Java

Embedded Platforms: AUTOSAR (SWC Layer), ADAS, MISRA C/C++ Compliance

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

 $\ \ \, \textbf{Operating Systems:} \ \, \textbf{Windows, Linux} \\$

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.