

Sheetal Dukki

India | sheetaldukki@gmail.com | +91-9108852978 | //sheetal-dukki-jain-795a22197

About Me

- 2+ years of industry experience in software development, testing, and functional safety for automotive active safety systems.
- Expertise in Software Development Life Cycle (SDLC), ensuring compliance with ASPICE and ISO 26262 standards..
- Regular collaboration with system engineers in Europe and the United States.
- Working experience in Germany, developing monitoring functions, defining test strategies, and vehicle testing for active safety products like ESP.
- Articulate, confident, and highly motivated individual seeking a position that utilizes technical expertise, problem-solving skills, and a willingness to learn to achieve career targets and contribute to mutual growth.

Technical Skills

- Programming: Embedded C, C++ , OOPs(Basics)
- Tools and IDE: ASCET, Test-IDE, VS Code, ATT, ,Shar-CC, SVN, Uni-view, Beyond Compare, MS Office
- Testing environments: SIL, ECU test, Unit Test, Component Test and Google Test in VS Code
- Active Safety: ESP, ABS.
- Communication Protocols: CAN, UART,SPI,I2C etc.
- Design Tools: Microsoft Visio, Flux, AxeStar.
- Requirement Management Tool: IBM DOORS.
- Configuration version Management Tools: TCM, ALM and GitHub.
- Standards Guidelines: ASPICE, MISRA guidelines, and the V-model development approach.
- Additional Knowledge: Basic understanding of AUTOSAR, ISO 26262 standards.

Experience

Software Engineer, Bosch Global Software Technologies Private Limited,
Bangalore, India

January 2023 – Present

- 2+ years of IT experience in embedded development of Active Safety functionalities in Automotive Industry.
- Worked as Software Engineer at Bosch Global Software Technologies Private Limited since Jan 2023.
- Function Owner for Monitoring component like IVM (iBooster VDA interface and Monitoring's) since 2023.
- Handled system requirements and degradation strategy for iBooster VDA interface and Monitoring's.
- Designed, developed, and delivered Monitoring components like iBooster VDA interface and Monitoring's, Brake Signals Monitoring.
- Knowledgeable about Active Safety Systems such as ESP, ESP-Hev, and ABS.
- Experienced in Functional and Software Requirement Engineering, architecture improvements, and tool usage like DOORS.
- Strong understanding of V-Model software development concept.
- Familiar with SDLC tools like ALM.
- Played a key role in defining documentation structure and content for ASPICE requirements.
- Experienced in Test Design concepts (Integration and Component Testing) and Unit Testing.
- Knowledgeable about ASPICE and documentation experience for ASPICE Compliance.
- Worked with European, American, and China OEMs and had customer interaction with multinational teams.
- Handled SWCR for monitoring's functions Pressor Sensor, Pump motor check, GLD for product ESP.

- Worked in Germany, developing monitoring functions and defining test strategies.
- Developed vehicle testing for active safety products ESP.
- Developed prototypes for Brake Signal Monitoring (BSM) in ESP (Electronic stability program) products.
- Participated in discussions with function owners for new feature developments.
- Conducted vehicle testing in Boxberg.
- Migrated ASCET components in C++.

Projects

January 2023 -present

IVM (iBooster VDA interface and Monitoring's)

- IVM handles the communication between iBooster and ESP. This monitoring component is responsible for triggering the HBC(Hydraulic Boost compensation) in ESP if iBooster failed to provide the brake boost.
- **Responsibilities:**
 - Requirement engineering on software level
 - Development based on requirements for monitoring's.
 - Involved in use case discussions.
 - Involved in unit testing (UT), Component testing (CT) and Software integration Testing (ASW IT).
 - Involved in prototype validation in SIL environment.
 - Training the team on all levels like requirement engineering, design, coding, testing.

January 2023 -present

Brake Signals Monitoring (BSM).

- BSM monitors the pedal travel sensor (PTS). This is a passive monitoring component which runs at each brake application. The pedal characteristics will be detected by BSM (hard pedal and soft pedal) and it also does the internal signal conditioning, offset calculation and correction.
- **Responsibilities:**
 - Determining the system state handling in ESP for BSM
 - Configuring Failure Word and the Degradation Strategy of ESP system
 - Generation of splitter file required for communicating the Failure with other components
 - Involved in prototyping and use case discussions.
 - Involved in migration of ASCET component in C++.

August 2018 – July 2022

Education

Visvesvaraya Technological University , BE in Electronics and Communication

- CGPA: 7.98/10 (a link to somewhere)
- MVJ College of Engineering, Bangalore, India

Honors and Awards

- Best Performer Award, Bosch Global Software Technologies.
- e-Cards and Spot Awards for critical release support.

Hobbies and Interests

- Cricket: Demonstrates teamwork, communication, and leadership skills.
- Farming: Cultivates patience and precision
- Reading: Reflects commitment to self-improvement and staying updated with industry trends.