Ankita Pardeshi

Automotive engineer

ankitapardeshi2397@gmail.com

08805385587

Royal inn luxury PG3 laxmi chowk marunji road Hinjewadi phase I

linkedin.com/in/ankita-pardeshi-3a1161250

EDUCATION

05/2021 – 10/2021
Pune

Sunbeam institute of management and technology, Post graduation diploma in embedded system designs Have knowledge of CAN, SPI, UART communication protocols, microcontrollers (ARM, STM32) and RTOS, Embedded C

05/2015 – 05/2019

Ssvps's bappusaheb Shivajirao deore college of engineering, BE(electronics and telecommunication)

PROFESSIONAL SUMMARY

Automotive Engineer(ADAS) with **3.3 years** of experience in **MIL/HIL Testing** & developing **virtual test cases** for **Autonomous Driving(AD) & Advanced Driver KPIT Technologies Assistance Systems(ADAS)** models. Highly proficient in simulation-based validation
using simulation tools like **CARLA and CarMaker**. Strong understanding of A**utonomous Vehicle Testing**, **perception**, and **control systems**. Adept at leveraging **cutting-edge testing methodologies** to enhance system reliability and efficiency. Passionate about driving innovation in **autonomous mobility solutions** through **rigorous validation** and **testing strategies**.

WORK EXPERIENCE

KPIT technologies pune 2021-2025 Automotive Domain

As an **Automotive Engineer(MIL/HIL Testing)** Developed and executed virtual **test cases for AD/ADAS** features (**AEB, ACC,**
Lane Keep Assist, CMBS) using CARLA and CarMaker.
Simulated real-world driving scenarios to evaluate AD/ADAS algorithms and improve perception accuracy. Worked on **MIL/HIL Automation**, **Python**.
Experience in working in **Agile methodology**
Automated testing workflows using Python to improve efficiency and reduce manual effort. Review the **Unit Test Plan, Functional test plan, requirement documents.**
Analyzed test results, debugged issues, and collaborated with software teams to enhance system performance.
Worked on sensor fusion techniques for improving object detection in complex environments.
Before the actual vehicle is built, you will develop an environment that can evaluate **ADAS** (Advanced-Driver-Assistance-Systems) using **MILS** (Model-In-the-Loop-Simulation)
Worked on Creating test cases that can be evaluated by MILS/HILS from actual driving data.
Creating test scenarios based on specifications.
Developing an automated execution environment for test scenarios.
Verification of control logic using **HILS/MILS**

Development of one of the following controls: collision damage reduction brake (**Advanced Emergency Braking System**), **Adaptive Cruise Control**, erroneous start control function, lane maintenance support/lane departure control system (**Lane Departure Prevention System**), **automatic parking, Lane change assistance.** Experience with **ASAM OpenSCENARIO**

PROJECTS Undertaken

Duration
27OCT 2021-
31MAR 2022

1.Cloud Closed Loop Development: Designed and validation of virtual test cases in CARLA simulator using **ASAM Openscenario standards**.
Also has understanding of AWS, testing in Katapault, Flask.

Technologies used: AWS, CARLA, OPENSCENARIO, Katapault, HTML, CSS, Javascript
Client : Honda R&D(Japan)

Duration
1Apr 2022-
31JAN2023

2.Feasibility study of integration of Carla/Carmaker with Unreal engine for data transmission: Modified carla simulator code for data transimmision of vehicle parameters to popular gamming engine unreal engine using python, C++ and TCP/IP communication protocol, designed complex virtual scenario for that. Created user manual for the complete process understanding for clients
Client : Honda R&D(Japan)

Technologies used: Python, C++, unreal engine, TCP/IP, **Openscenario**.

Duration
27OCT 2023-
31MAR 2025

3.CMBS scenario creation: Modeled complex scenarios for CMBS for different traffic protocols like JNCAP, CNACP, EuroNCAP, Asean NCAP USNCAP etc.
Testing of AD/ADAS models using matlab & simulink, CMBS feature testing, Develop and execute MIL tests, **Fix defects**, **Implement change** requests, Review management and leading/reviewing for release.
developing reports for model testing, leading the team and releases.
Developes the test scripts for test cases in **Automation desk & execute the testcases on control desk.**
Detailed analysis of **Hardware & software requirements.**
Undersatanding of **CAN & UDS** protocols
Client: Honda R&D(Japan)
Tools & Technologies: CarMaker, **MATLAB/Simulink**, **Python** , **MIL/HIL** testing of AD/ADAS models, **Functional safety**, Functional test plan creation,**Dspace tool chain - Automation Desk, Control Desk, Model Desk, Motion Desk, LabVIEW Framework Vector- Canape, Canalyzer**
Version control tools : **SVN, GIT**
Communication Protocol: **CAN,UDS**

SKILLS

Automotive AD/ADAS virtual testing & validation **Mils/HIL** testing of AD/ADAS Models **Simulation tools**: CARLA, CarMaker Python, MATLAB, Simulink. Scenario-based testing. **ASAM Openscenario Creating test scenarios Knowledge of CarSim Knowledge of SDLC and agile methodologies Automotive safety standards (e.g., ISO 26262)** virtual Sensor testing Team leading/handling and Technical presentation skills Stakeholder communication Technical leadership Functional test plan creation to steamline scenario creation **Python**, **C++**, TCP/IP protocol Model based testing understanding of automotive communication protocols (**CAN**, LIN, Ethernet, **UDS)**