Harshal Mehta

A generalist looking for a role that has synergy between mechanical, software & electronics, specifically in the field of ADAS & Active Safety development & testing

Bengaluru
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harshalwork157@gmail.com
Harshal Mehta

Work Experience

Vehicle Dynamics & ADAS Engineer / Xitadel CAE Technologies, Bengaluru *Mar 2022 - present*

- Supporting & Servicing Indian OEMs, suppliers & research institutes working on Vehicle Dynamics & ADAS by using CarSim, BikeSim or TruckSim
- Algorithm development of Active Safety controllers such as Antilock Braking System, Collision Avoidance Systems using Simulink & Stateflow
- Model in Loop (MIL) & preliminary Software in Loop (SIL) testing of controllers
- Scenario Generation to facilitate Virtual Homologation of Vehicle Dynamics & Controller testing as per Euro NCAP, FMVSS & ISO standards
- Working on sensor modelling & perception based subsystem for Autonomous Vehicles
- Working on process automation using Python

Modelling & Simulation Engineer / Vioma Motors, Mumbai *Nov 2020 - March 2022*

- Focused on physics based mathematical modelling of Electrical and Mechanical systems using Simulink while performing co-simulation with BikeSim & MSC Adams.
- Responsible for FEA & CFD studies required for product development & subsequent optimizations using ANSYS Workbench.

Projects

Senior Engineer / DJS Racing, Mumbai *2017-2019*

- Responsible for the overall Electric Powertrain, Drivetrain, Steering & Tire departments of the electric race-car prototype.

Pathik – A Route Optimization Algorithm *2020*

- Developed a website using the Heuristic & BnB approach for the Travelling Salesman Algorithm

Research Publications

- Mehta, H. P., Shaikh, P. S., Mallikarjunaiah, U., Kamble, V. et al., “A Comparison Study on Control Strategies for Optimization of an Anti-Lock Brake System Algorithm Based on Tire Force Measurement in Pure & Combined Slip Conditions of an Automobile,” SAE Technical Paper 2023-01-0694, 2023, doi:10.4271/2023-01-0694
- P. Mehta, Shaikh, H. Bhanushali, R. Abraham, J. Soni, R. Birajdar, D. “Design of an Accumulator Container for a Formula Student Electric Race Car.” ICIMA Springer (2020): 825- 836

Technical & Software Skills

- Model Based Development
- CARLA Simulator
- CarSim, BikeSim & TruckSim
- MATLAB, Simulink & Stateflow
- Python & C++
- Vehicle Dynamics
- Model in Loop Testing
- Control Systems

Education

B.E. Mechanical / Dwarkadas J. Sanghvi College of Engineering, Mumbai. *2016-2020*

CGPA- 8.3/10