A|S

ABHIMANYU SINGH

SENIOR ENGINEER

📍 217, Type-2, IIT Campus, Kanpur, 208016, India

📞 +91-9980171388

✉️ abhimanyu.manyu@gmail.com

LINKS

LinkedIn:
https://www.linkedin.com/in/singabh/

SKILLS

Simulink

Matlab

Akka:Provetech

ETAS:INCA

Vector: Canape, Canoe

Tortoise SVN

Confluence

dSpace HiLs - Configuration Desk, RTICANMM, Control Desk, Flexray Configuration Package

Ansys Fluent

Automobile Engineer with over 7 years of experience in Hardware in Loop simulations on dSpace HiLs. My areas of interest include model based development of physical systems, transmission modeling, driver modeling, vehicle dynamics, thermodynamics, heat transfer, fluid mechanics.

WORK EXPERIENCE

Mercedes Benz Research and Development India Private Limited
Apr 2018 - Present
Bangalore

SENIOR ENGINEER

- Primary responsible for the modeling and integration of 8eDCT project on HiL for the new generation of vehicle and network architecture.

- Primary responsible and single point of contact for AMG P3 project coordination, modeling and integration on dSpace HiL systems for powertrain ECUs

- Error analysis and debugging of issues observed in level 2 monitoring tests, FuSi tests and updating the models for improved system behavior, if applicable.

- Modeling and integration of the next generation of 9 speed automatic gearbox (NAG3Mopf) on transmission HiL systems.

- Mentoring new colleagues and constant knowledge sharing in the team, cross collaboration support between India and Germany.

Mercedes Benz Redearch and Development India Private Limited
Apr 2015 - Apr 2018
Bangalore

ENGINEER

- Flexray model implementation for gearbox, engine and powertrain HiLs for different v-cycles in dSpace scalexio and PHS systems.

- Delivery of models for different car lines and engine variants for Fusi tests for the 9 speed automatic

- Responsible for the modeling and simulation of 7 speed automatic transmission on HiL systems.

- Development of the 8-speed dual clutch transmission (8DCT) controller.

EDUCATION

MASTER'S DEGREE

Indian Institute of Technology Bombay / Mumbai / 2014

Master of Technology in Thermal and Fluids Engineering
Masters Thesis on "Flow and heat transfer in converging, diverging and spiral microchannels"
CGPA - 9.1 /10

LANGUAGES

English

Hindi

German

HOBBIES

- Tennis
- Cricket
- Running
- Astrophotography

Mercedes Benz Research and Development India Private Limited

Jul 2014 - Apr 2015
Bangalore

POST GRADUATE ENGINEER TRAINEE

- Responsible for modeling of driver model with a speed controller to run different drive cycles like NEDC, WLTP, US06 etc on HiL systems by changing accelerator and brake pedals.

- Responsible for the simulated brake controller with cruise control algorithm.

- Responsible for vehicle dynamics modeling.

PUBLICATIONS

International Journal of Heat and Mass Transfer, Vol. 80, pp. 424-438
Oct 2014

CONVECTIVE HEAT TRANSFER IN DIVERGING AND CONVERGING MICROCHANNELS

Scientific Reports 6, article no.18230
Jan 2016

A SIMPLE AND NOVEL WAY OF MAINTAINING CONSTANT WALL TEMPERATURE IN MICRODEVICES

Proceedings of Indian National Science Academy 82 No. 2 June Special Issue, pp. 321-328
May 2016

THREE-DIMENSIONAL NUMERICAL STUDY OF CONJUGATE HEAT TRANSFER IN DIVERGING MICROCHANNE