### RESUME

Name: Sandesh Permude

**Contact Number:** 

Mobile: +44-7448713200

Email Address: permude.sandesh@gmail.com

sandesh\_permude@yahoo.co.in

**Qualification:** B.E. (Mechanical Engineering), MSc (Automotive Engineering)

**Experience**: 13+ years

<u>Current Job Description</u> - Senior Engineer

Working as Senior Engineer in powertrain - strategy planning and advanced concepts. Responsible for supporting powertrain strategy with simulation and data analysis. Reporting to Lead Engineer and supporting tech specialist (fuel economy). Main roles:

- Developing models in GT-suite/Simscape/Simulink to anlayse energy efficiency of Conventional, hybrid and electric vehicle
- Developing high level control strategies optimising fuel economy of hybrid electric vehicles supporting Advanced product creation
- Using Energy analysis to enable electric hybrid vehicle architecture comparison (ex: P2 vs series, P2 vs powersplit)
- Sensitivity studies estimating effect of system efficiency change on vehicle energy efficiency
- Validating models with test data
- Developing tools and methods to visualise data in various formats and contexts supporting presentation to senior management
- Preparing passenger car market summary
- Unerstanding fuel economy legislation (ex: WLTC)
- Desktop shiftmap and pedal map generation tool

# Past experience:

- Worked as CAE analyst, Performance Econoomy and Driveability at

  Jaguar and Landrover Engineering (Tier2 Visa sponsor Affluent Technologies,

  UK) since Feb 2014 (2 year 9 months)
- Worked as Lead Analysis Engineer, Transmission at **General Motors**Technical Centre ,India from April 08 to Feb 2014 (5 years 11 months)
- Worked as software testing Engineer for Multibody Dynamics Software MotionView/MotionSolve at **Altair Engineering, Bangalore** from Sep 2007 to March 2008 (6 months)
- ➤ Worked as Assistant Manager in Part Development and Certification Dept. at M/S **Mahindra & Mahindra Ltd.** from August 2004 to August 2006 (**2 years**)

## **Past Projects:**

- Simulation of MHEV for NEDC schedule and demonstrate benefits of hybrid technology over NEDC
- 2. Fuel economy simulations for automobiles over schedules like NEDC, WLTP, FTP.
- 3. Establishing engine residencies for FE cycles and comparing engines
- 4. Correlating simulink model to actual vehicle using dyno test data for ECE schedule
- Investigating impact of change in transmission upshift maps on real world usage driving on fuel economy
- 6. Correlation study of the powertrain model with the test data
- 7. Performing dutycycle analysis for new transmission under development
- 8. Updating the matlab-simulink vehicle model to include latest changes to the vehicle control/subsystem (ex: transmission torque management)
- 9. Developing matlab tool to auto generate shiftmap/pedal map for automatic transmission vehicles
- 10. Generating drive schedules from test data

- 11. Performing Top Gear Gradeability and Driveability analysis for vehicles with various new transmission/vehicle configurations
- 12. Comparision of fuel economy of 6 and 8 speed transmissions for the same vehicle application.
- 13. Supporting the testing of Motion View/motion solve 10 (multibody dynamic analysis software from Altair Engg.) 6 months
- 14. Improving the CSI/SSI index of Mahindra & Mahindra 3 months
- 15. Development of Suspension parts for SUV Bolero and Scorpio at Materials
   Management Department, Mahindra & Mahindra, Nasik 1 year 2 months
   16. MSc Project: "Dynamic Simulation and Analysis of Front suspension of a passenger car using ADAMS/View"- 3 months

## **Skills:**

Knowledge of MATLAB/simulink/simscape, GT-suite, understanding of vehicle system modeling in matlab/simulink environment, Modeling and control of electric hybrid and electric vehicles focused on energy efficiency, Understanding of CAE analysis process (data handling, process quality control, model release and version control) for fuel economy and transmission durability.

Understanding of FE cycles like NEDC, WTLP, FTP etc.

#### **Professional recognitions:**

- Received Employee Innovation award for the year 2018
- Received spontaneous recognition award for shiftmap generation tool -2012
- Received Employee Innovation award -2013

# **Personal and Educational Details:**

**Date of Birth** : 26-09-1982

**Present Address:** 

#6, Yule Road, Coventry, West Midlands, United Kingdom, CV2 3DB

**Educational Qualifications:** 

**Post Graduation: MSc (Automotive Engineering)** 

**Institution:** M.S. Ramaiyah School of Advanced Studies

(MSc programme offered by Coventry University, Coventry, U.K.)

Pass out Year: 2007

cai. 2007

**Average grade:** A (Gold medalist for the year 2006-2007)

Subjects Studied: Power Train, Vehicle Dynamics and Control, NVH, Risk &

Reliability, Advanced Manufacturing, CAD/CAM, Vehicle Aerodynamics, Finite

Element Analysis, Structure safety and Impact,

Specialization in Vehicle Dynamics

**Dessertation**: "Dynamic Simulation and Analysis of Front suspension of a passenger

car using ADAMS/View" – 3 months

#### **ENGINEERING:**

Branch of Bachelor of Engineering: Mechanical

INSTITUTION: Manipal Institute Of Technology.

UNIVERSITY: Manipal Academy of Higher Education [Manipal University]

Year	Semester	%Marks	Semester	%Marks	Year wise %	Class
2000-01	1st	76.67	2nd	69.78	73.22	Distinction
2001-02	3rd	78.22	4th	76.22	77.22	Distinction
2002-03	5th	73.67	6th	73.89	73.78	Distinction
2003-04	7th	80.75	8th	83.75	82.25	Distinction

CONSOLIDATED AGGREGATE PERCENTAGE: 76.62