

Varun Kurup

CONTACT INFORMATION

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MISSION STATEMENT

Seeking an entry level position in the engineering department to apply my analytical skills as an engineer and managerial skills from prior work experience

EDUCATION

Michigan Technological University, Houghton, Michigan
M.S. Mechanical Engineering May 2010 **GPA: 3.45**

M.E.S. College of Engineering, Pune, Maharashtra, India
B.E. Mechanical Engineering July 2007 **First Class with Distinction**

PROJECT EXPERIENCE AT MICHIGAN TECHNOLOGICAL UNIVERSITY

Eco-Car Challenge

Design Volunteer, Spring 2009

Project: Modification of the Saturn VUE in order to improve energy efficiency and reduce green house gases

- Designed the dual clutch system to couple engine with an electric motor
- Performed a market survey on clutch manufacturers to see which fits our design best

Cam Phasor, Regenerative Braking Calibration and Battery Analysis (General Motors)

Project: To increase the fuel economy of the Chevy Malibu Hybrid without compromising drive quality and reducing overall costs

Analysis: Used **GT Power** for cam phasor calibration and actual Dynamo meter readings for regenerative braking calibration

Results: Improved fuel economy by **17.78%** and peak acceleration at Wide Open Throttle by **28.02%** with respect to baseline data

LEADERSHIP AND WORK EXPERIENCE

Plant Growth Management Systems LLC :

Intern Mechanical Engineer, 08/10 – Current

Researching the possibilities of utilizing a data acquisition system through flash drive for flow meter on an injection probe

Mercedes-Benz India Private Ltd:

Graduate Engineer /Assembly Line Manager, 09/07 – 08/08

Department: Production, commercial vehicles

- Managed a team of twenty operators for the assembly of the Actros 4840 mining truck
- Conducted and then trained operators to perform brake tests and road tests on the Actros 4840
- Rectified and diagnosed problematic trucks using **Mercedes Star Diagnosis software (DAS)**
- Increased new operator efficiency creating a photo manual of all stages of the assembly process using Microsoft Excel
- Reduced assembly time from 400 man hours to 200 man hours as part of a continuous improvement team over 6 months

Forbes Marshall:

Graduate Engineer, Boiler Marketing and Sales, 08/07 – 09/07

- Analyzed the steam requirements of small scale textile mills and cost effectiveness of their current boiler set up
- Concluded that producing a new small industrial boiler wasn't a profitable business investment for Forbes Marshall

Tata Motors:

Project Trainee- Engine Assembly Line, 07/06 – 06/07

- Used **AutoCAD 2000** and **ProEngineer Wildfire** to design a portable test rig for piston cooling nozzles
- Achieved objective of testing every engine on the line in real time instead of random testing

INTERNSHIPS

Madras Diesel Center (MICO-BOSCH), 06/05 – 07/05

- Learned to dismantle and re-assemble Bosch fuel pumps, as well as adjust timing
- Observed the effects of high temperature on injectors and other potential clogging factors

SKILLS

Competent in GT Power, AutoCAD, ProEngineer, SimaPro, Matlab and Microsoft Office

EXTRA CURRICULARS

- Member of Michigan Technological University's soccer club (2008- 2010)
- Member of high school and college basketball, soccer and track teams (2001-2007)