

**SUMMARY:** MS Mechanical Engineering student with professional experience, hands-on project work, and skills in Manufacturing, Design, Engines, Vehicle Development, and Testing and Validation.

## EDUCATION

Michigan Technological University  
**MS Mechanical Engineering** | GPA: 3.75

Houghton, MI  
Expected 2017

## PROFESSIONAL WORK EXPERIENCE

**Project Engineer** | ZF Steering Gear (INDIA) Ltd. Manufacturing Division | Pune, India | Sept 2014 – July 2015

- Assembled and tested Mechanical and Power Steering System.
- 3D Modeling of machines on shop floor to reduce material handling.
- 3D and 2D lean plant layout design to reduce material handling and for efficient distribution of machines.
- Supervised in Airnet Piping, Centralized Coolant Filtration System, Air Supply Unit Ducting Projects to meet project deadlines and ensure material and workforce requirements were met.
- Maintained department documents needed for quality and environmental management standards (ISO/TS 16949 and ISO 14001 respectively).

## INTERNSHIP EXPERIENCE

**Student Engineer** | Tata Motors | June 2012

- Disassembly of vehicle, complete assembly of vehicle from scratch, brake overhaul, steering alignment.

## ENGINEERING PROJECT EXPERIENCE

**Project:** Design and manufacture muffler for Kirloskar CI single cylinder engine with muffler volume of 4.9575 liters, diameter and length of 0.15mm and 280.5mm respectively for optimal noise control. Published research paper in IJLTET. ISSN: 2278-621X.

**Project:** Design, test, and build formula style racecar for international SAE competition.

**Project:** Determine design parameters that optimize vehicle performance for acceleration time, fuel economy, top speed specifications and cost of modification.

**Project:** Perform coastdown testing of Chevrolet Volt and Chevrolet Malibu from 55 mph to 25 mph to determine rolling resistance and drag coefficient and to identify impact of vehicle parameters on drag and rolling resistance.

**Project:** Develop and analyze performance parameters of Chevrolet Volt and Chevrolet Malibu for two different drive cycles to validate fuel efficiency, as well as determine performance of vehicle in real world conditions.

**Project:** Identify relationships between various load parameters including torque, throttle position, airflow, manifold pressure, and Mean Effective Pressure and performance efficiency, and to meet application specific performance requirements.

**Project:** Model exhaust system and floor pan of a prototype military HMMWV XM 1124 using thermal modeling tool TAI Therm, and calibrate and validate model with experimental data.

## COMPUTER/TECHNICAL SKILLS

- |                           |                   |                               |                |
|---------------------------|-------------------|-------------------------------|----------------|
| ▪ CATIA V5R20             | ▪ ANSYS CFD Post  | ▪ Mechanical APDL             | ▪ Mastercam X5 |
| ▪ Autodesk Inventor Prof. | ▪ ANSYS Fluent    | ▪ ANSYS (Structural Analysis) | ▪ MATLAB       |
| ▪ PRO-E                   | ▪ ANSYS Workbench | ▪ Autocad                     | ▪ Simulink     |
| ▪ AVL Cruise              | ▪ 5 S & Six Sigma |                               | ▪ Labview      |

## EXTRA CURRICULAR ACTIVITIES

- Member, **Leaders in Continuous Improvement Organization** at Michigan Tech - focused on hands-on experience in 5S and Six Sigma through industry trips
- Volunteer, 2016 USSA Nordic Ski Championships, Michigan Tech.