

FIRST NAME LAST NAME

Contact details

SKILLS & SOFTWARE

Component/Product design & analysis, CAD/CAE (Solid Modelling & Assembly, Surfacing, Sheetmetal), Structural analysis, Thermal analysis, GD&T, Tolerance stack-ups, Product documentation, Prototyping, Engineering Change Orders (ECOs), Bill of Materials (BOM), Sub-systems evaluation, cross-functional interactions, ERP, DFM/DFA, FMEA, ProEngineer/CREO (Certified), CATIA, Ansys (Certified) (Workbench & APDL), LS DYNA, Microsoft Office, Matlab, Minitab, Teamcenter

PROFESSIONAL EXPERIENCE

XYZ, India

May 2018 – July 2018

Project Lead Intern (Voluntary), Design Department

- Led a project for returnable packaging that saved the company \$2000, helped in reducing waste and tremendously reduced human efforts in packaging.
- Designed a returnable steel frame for packaging & delivery of flywheels using Creo.
- Reviewed customer concerns about quality, safety of flywheels; reviewed design, and redesigned the frame solving customer concerns.

ABC, India

March 2017 – February 2018

Trainee Development Engineer & Jr. Marketing Engineer, Development & PPC Department

- Co-ordinated with suppliers for development of **new material handling solutions**.
- Established use protocols by training labor workforce and set up resource management of packaging materials.
- Maintained relevant documentation for new products such as PPAP, PFMEA and SPC.
- Co-ordinated with suppliers, in-house teams, and OEM customers to effectively maintain established supply chain with minimum disruptions.

EFG, India

January 2016 – December 2016

Trainee Quality Engineer, Quality Department

- Performed root cause analysis of rejected components for improvement in future batches for machining.

ACTIVITIES & MEMBERSHIPS

Team MECH(Formula Hybrid SAE (FHSAE))

August 2020 - Present

- Designed an adjustable brake pedal assembly in compliance with Formula Hybrid rules.
- Made use of **Solidworks** to create CAD models and analyzed using ANSYS.

ACADEMIC PROJECTS

Systems engineering review of 'Destiny' module of ISS.

August 2020 – Present

- Performed phase gate reviews of the Destiny module.
- Conceptualized the design ,test, verification, and testing of the module.

Optimization of brake disc geometry for improved braking performance

February 2020 – May 2020

- Optimized an automotive brake using 'Response Surface Optimization Toolbox' to increase braking performance.
- Achieved reduction in dimensions by 10% for improved braking performance by reducing stress, temperature and increasing maximum frequency.

Design of AC-40 compressor

September 2019 – December 2020

- Used 'PTC Creo' to create the various part modules (engine, compressor, impeller casing, impeller) and then assembled those parts together to create an appropriate mechanism.

Design and analysis of truck flywheel

September 2019 – December 2019

- Designed a flywheel along with ring gear and bushing and assembled it in PTC Creo.
- Performed stress, deformation, and modal analyses in 'Ansys Workbench' and analyzed stresses and deformation.

Automatic tire inflation system

August 2014 – May 2015

- Piloted the development of a prototype system for heavy trucks which enabled automatic inflation of tires and maintaining tire pressure while the vehicle is in motion for ensuring longer life of tires, improving fuel economy, and preventing tire explosions.
- Delegated tasks to project members for successful and timely completion of the project.
- Engaged in product development cycle from ideation to realization of the system and everything in between.
- Secured a sponsorship for a critical pressure sensor from PVDFR Ltd. which saved the team, \$300.
- Collaborated with 'EWSfdA Ltd.' to interface sensors with Arduino for desired working of sensors and relays.

EDUCATION

ABCD University, USA

Expected May 2021

Master of Science, Mechanical Engineering (MSME)

Relevant Coursework: CAD/CAM, Advanced Finite Element Analysis, Mechanical Behavior of Materials, Additive Manufacturing, Intro to Systems Engineering, Optimal Design of Complex Mechanical Systems

EFGH, India

Graduated June 2015

Bachelor's in engineering, Mechanical Engineering (B.E)

Relevant Coursework: Machine Design, Theory of Machines, Strength of Materials, Automobile Engineering, IC Engines