

Objective:

Seeking recruitment to use and increase my knowledge and technical skills in the field.

Academic Chronology:

Degree	Institute	Grade/Percentage	Year of Passing
Bachelors of Technology	Indian Institute of Technology, Patna	9.06/10	2016
Intermediate	DAV Public School, Kota	87%	2012
Matriculation	DAV Public School, Pune	9.8/10	2010

Work Experience:

I was part of the following projects as part of my Internships:

Research Project Title : Replacing 3D CAD Modelling Software with CATIA in a Life Cycle Assessment Tool
Project Guide : Dr. Amaresh Chakrabarti, Professor, CPDM, IISc Bangalore
Project Details :

- Work included upgrading the existing LCA Tool used at the institute by replacing its CAD Software with CATIA while maintaining the data formats so that the features of the software could be linked to the existing.
- Reading the data from the generated data files and converting them into an assembly tree structure with a user interface for the intermediate steps using tools from the Visual Studio 2015 and interfacing the process with visual basic Windows Forms Application.

Research Project Title : Vibration Analysis of a Mass Varying Dynamic System

Fellowship Program : IAS Student Research Fellowship Program 2014

Project Guide : Dr. Karuna Kalita, Assistant Professor, Mechanical Engineering, IIT Guwahati

Project Details :

- Work included analyzing a cantilever beam and its vibrations with variation in mass under different waveform profiles including Constant, Linear periodicity and Sinusoidal Variation.
- The variation in mass was achieved with the use of comparable density fluids and Programmable DC Motors to provide desired mass flow rate waveforms to obtain desired mass flow waveforms.

Major Group Projects Undertaken:

1. SAE India- BAJA 2015

March 2014 — February 2015

- Courtesy to this project of designing an All-Terrain Vehicle, I gained exposure to an overall experience of the working and manufacturing requirements of an Automobile.
- I was the head of the department of **Suspensions and Design** and therefore have a detailed knowledge of the Suspensions composition and working whilst also designed the whole suspension system on Solid Works and validated and tested on Ansys software.
- We manufactured the vehicle and participated in the competition.

2. ASME India- HPVC 2014

September 2013 — January 2014

- The American Society of Mechanical Engineers (ASME) organized the first Indian Human Powered Vehicle Challenge (HPVC- India), 2014 where we designed a Semi-Recumbent Trike with overall achievement of 42 kmph speed at top gear.
- I worked in the Steering Department of the vehicle's design and designed an under- seat steering with the concept of Crossed Dual Drag Linkage mechanism.

Achievements:

- Scored an overall **10th rank** and were one of the top three-wheeled vehicles.

3. Stirling Engine Generator:

March 2014 — May 2014

- We developed a prototype Stirling Engine Generator capable of generating upto **7-8 Volts** of voltage with the use of acrylic components and small DC Motor turned Generator with the aim of replacing the long carried lamps with light energy equivalent to 40 LEDs.

4. Wireless Air-Cushioned Hovercraft

September 2013

- This remote controlled Bot was designed using Brushless DC Motors programmed via ESCs code on Arduino and Python.

Skills:

- I have a good command on languages such as C, C++, Visual Basic, Visual C++, JAVA, Python, and MATLAB.
- I also have apt knowledge of software such as AutoCAD, ProE, Solid Works, Ansys, Adams, Flowex, LabView, and Pulse LabShop.

Extra-Curricular Activities:

- I am an **Inter IIT Basketball** player representing my college at the Annual Inter IIT Sports Meet.
- I am currently **Technical Head**, Students' Council of Mechanical Engineers (SCME), IIT Patna.
- I have handled the position of **Task Manager**-Industry Relations, Entrepreneurship Club, IIT Patna.
- I am a **Vocalist** and have performed in Anwesha 2015 and Reverberance 2013.

References:

Available on Request