Abhinav kumar Das B.tech. (5th semester) Department of Mechanical Engineering. Indian Institute of Technology Patna Date of birth: 11-11-1993 Roll No: 1301ME02

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Area of Interests

Aerodynamics, Automobiles, Thermodynamics, Fluid mechanics, Robotics, CAD/CAM, General machinery, Solid mechanics.

Educational Qualification

Year	level	Institute	CPI/Percentage
2015	B.Tech , Mechanical Engineering	IIT Patna	7.44/10
2012	B.S.E.B, Intermediate Examination	L.S. COLLEGE , Muzaffarpur, Bihar	75.8 %
2010	C.B.S.E	Holy Mission Sr. Sec. School, Muzaffarpur.	9.6/10

Academic Activities

- Secured AIR (All India Rank) 4854 in IIT JEE- 2013 among 1.6 million student all over the India.
- Awarded MCM (Merit-Cum Scholarship) Scholarship in Academic Year 2014-15.

Projects:

1) SUPRA CAR:-

(Faculty advisor : Dr Manabendra Pathak , Asst. Professor , IIT Patna)

Supra is a racing event of SAEINDIA in which undergraduate students from all over the India participates in this event, which gives the lots of knowledge about dynamic of car and its working principles. We firstly qualified the virtual round held in January, and made the car as a summer project in Academic year 2014-2015. We successfully participated in **SUPRA SAEINDIA** event held in **Chennai** from 14 July to 19 July 2015.

2) Adjustable unified wheel/ Nut opener -

(Faculty advisor- Dr Probir Saha, Asst. Professor, IIT Patna and Dr S.S Panda, Asst. Professor, IIT Patna).

Gear ratio mechanism and use of universal joint with adjustable length of arm made this project to open wheels or any "NUTS" situated in any plane.

3) Design of Column of Steering system:

(Faculty advisor: Dr Mayank Tiwari, Associate Professor, IIT Patna).

Column design requires the concept of failure and the buckling. I am designing it so that it would have low cost high strength and it would have minimum in length. Many software requires for this purpose such as Solidworks, Ansys, Adams also Matlab for mathematical calculations.

Extra-Curricular Activities

- Actively participating in College Cricket league.
- Worked as event organiser in **ANWESHA** (College Annual Techno-Cultural Extravaganza).
- Actively Volunteer for SAE collegiate club.
- Working as TECHNICAL HEAD in SCME (Student Council of Mechanical Engineers).
- Member of Team SUPRA IIT Patna for SAE SUPRA 2015. We have qualified the virtual round and successfully designed a formula racing car and participated in SAE SUPRA 2015 held on 15 July to 9 July 2015 in Chennai.

Relevant Courses Undertaken

- Engineering Drawing
- Thermodynamics
- Introduction to computing
- Object oriented programme and data structure
- Engineering mechanics
- Electrical Machines
- Basic -electronic laboratory
- Engineering Material
- > Electrical science
- Advance solid Mechanics
- Solid mechanics
- Fluid mechanics

- Electrical machines laboratory
- Mechanical Engineering Laboratory
- Mechanical Workshop
- > Heat and Mass Transfer.
- Manufacturing Technology- I
- Mechanical Measurements
- Design of Machine Elements.
- Kinematics of Machinery.
- > Applied Thermodynamics.
- Mechanical Engineering Laboratory –II

SKILLS

- APPLICATION SOFTWARE: Auto-CAD, Solidworks, PTC Creo, Matlab, Ansys
- OPERATING SOFTWARE: Microsoft Windows 7/XP/vista/8
- > PROGRAMMING LANGUAGES: C, JAVA, Matlab,
- > MECHANICAL TESTING MACHINES: Good touch with experimental setups such as universal testing machines, Brinell hardness testing, torsion testing, impact testing and DAQ. Also have experience of other fluid and metallography experiments.
- > ADVANCE MANUFACTURING MACHINES: Had a hand on experience with many machines including rapid prototyping, laser cutter, wire-EDM and computer integrated manufacturing systems.

I hereby declare the information given above is true to the best of my knowledge, as of April, 2015.

Alchinais Kr Dees

Abhinav Kumar Das