

# SAURABH KUMAR GUPTA

B.Tech (3rd year) Mechanical Engineering Indian Institute of Technology Patna (+91-7791897471)

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EDUCATION				
<b>Educational Detail</b>	Board/University	Institute	CGPA	Year
Graduation	IIT PATNA	Indian Institute of Technology Patna	7.9/10	2013-17
Intermediate	I.S.C.	Scholars' Homes, Gomtinagar (U.P.)	87 %	2012
Matriculation	C.B.S.E.	Jawahar Navodaya Vidyalaya, Mau (U.P.)	9.5/10	2010

Secured All India Rank '3' in Chemistry in National Level Science Talent Search Examination 2010.

Seeking for an Industrial Internship for the application of my knowledge, technical skills and their continuous improvement with the vision to obtain a position of responsibilities that utilizes my skills and experience.

#### **WORK EXPERIENCE**

## Winter Internship: Automotive IC Engine Design and Development

December 2014

**Guide: Dr Somnath Roy** 

**Guide: Dr Probir Saha** 

Guide: Dr Papiya Raj

- Attended 80 hours training program on Automotive IC Engine Design and Development, basic and advanced.
- Worked on a project in a group of 10 students to provide a new approach for use of variable valve actuation mechanism to enhance engine performance and emission requirement.
- My major contribution included writing and presenting the standard SAE technical paper.

#### **MAJOR INTEREST**

- Machine Design: Theory and application (CAD: Computer aided design), Advanced Manufacturing Processes.
- Thermodynamics (IC Engines, Power Plant)

# **ACADEMIC PROJECTS UNDERTAKEN**

**SAEINDIA BAJA'16** 

- **Guide: Dr Somnath Roy** Represented our college team in the design presentation round as an Engine and Transmission Captain.
- Cleared for the second phase to fabricate our very own designed All-Terrain Vehicle (ATV).

#### **SAEINDIA BAJA'15**

Successfully fabricated the first ATV of our college and participated in the main event, gained experience of working and manufacturing requirements under challenging circumstances as a team.

## Semi-Automated Lac-Bangle Machine Prototype (on-going Project )

Designing and fabrication of lac-bangle machine prototype.

## Designed and manufactured a Reciprocating Pump (Mar-Apr 2015)

Lead a team of 4 members and done detailed study of flow of water in the one way valve and decided to use Elliptoid governing ball especially focused to solve the water logging problem in the villages.

## Hydraulic Arm Competition under SCME, technical club of IIT Patna

Designed the Hydraulic Arm cad on Auto cad software and fabricated the model with the help of manufacturing machines available in the institute, securing 5<sup>th</sup> rank among 22 participating teams.

#### A device to monitor Health Status

Proposed a device integrated with sensors to monitor the health status on periodic basis.

#### TECHNICAL UNDERSTANDING

- Machine designing software- SolidWorks, AutoCAD and Pro-E, Ansys
- Programming Skills- C, MATLAB, JAVA (OOPS), Arduino, AVR.
- Other Software and Skills-Microsoft Office, Adobe Photoshop CS6

## LEADERSHIP AND POSITIONS OF AUTHORITY

## Student Head Unnat Bharat Cell | IIT Patna

Taken the responsibility to bring out all the authentic technological challenges in and around the villages and provide solutions under 'UNNAT BHARAT ABHIYAN', an initiative taken by Central Government of India.

#### PR Representative | SCME (Student Council of Mechanical Engineering) | IIT Patna

Managing the creatives of all Mechanical events and activities as well as promoting through social media.

#### **EXTRACURRICULAR ACTIVITIES**

- I extremely enjoy devoting myself to the public service and guiding someone based on my experiences and knowledge.
- Represented our college during Inter IIT sports meet (49th and 50th) as a volley ball player. Mentoring the volley ball team for 51st Inter IIT sports meet 2015.
- Performed as a stage singer during various cultural fests. Enjoy song editing and mixing.