ASHUTOSH GARG
Mobile No.: **+91-8360875243**
Department of Mechanical Engineering
Indian Institute of Technology, Ropar
Undergraduate: **2nd** Year

Mobile No.: +91-8360875243
Email-id : **2018meb1213@iitrpr.ac.in**
Linkedin: **www.linkedin.com/in/link-with-garg**

ACADEMIC DETAILS

Qualification	University	Institute	Year	CGPA/Aggregate
Under Graduate Specialization	IIT Ropar	IIT Ropar - India	2022 (Expected)	8.5/10
Intermediate : PSEB	PSEB	Life Guard Senior Secondary School, Kalaudi	2018	80.9%
Matriculation : AISSE	CBSE	General Gurnam Singh Public School, Sangrur	2015	9.6/10

TECHNICAL SKILLS

Worked with:

1. **Languages:** C,C++, Python, ROS*
2. **Design Tools:** SolidWorks(CSWA certified), AutoCad
3. **Simulation tools:** LS-DYNA(LSTC)*, ANSYS(FEM, CFD, LS-DYNA)*
4. **Software Packages:**Adobe Premiere Pro*, MATLAB, Adobe Photoshop*
5. **Robotic Devices:**Raspberry pi, Arduino
6. **Operating Systems:**Windows, Ubuntu

INTERNSHIPS

1. **Marketing Intern at IQuest Institute: an initiative by IITians** *Dec'18*
   My role to play during the internship period was to decide the marketing strategies for the educational institution which prepares student for competitive exams, providing a midway solution for problems to reduce loyality gaps between customers and Institute and I also organised I-SAT 2019 under some professional supervision which was held successfully on 6 Jan, 2019.

PROJECTS

1. **HY Contest 1st runner-up at International Hydrogen Fuel Cell Conference (IHFC-2019)** *Oct'19 to Nov'19*
   The problem statement was given by Hydrogen Association of India(HAI) In association with International Association of Hydrogen Energy, in demand to develop a Hydrogen filling Station for Heavy duty vehicles and team won second prize and were invited to attend the conference in Mumbai during 8th – 10th Dec. 2019.
   Guide:**Dr. Dhiraj K. Mahajan**
2. **Ballistic Impact Modeling of Composite Materials** *May'19 -still in progress*
   The project is based on improving the armor technology. We are trying to make a light weight and highly tough and durable armor for the Indian Army and currently simulating the different material combinations and arrangements proposed, with the help of simulation LS-DYNA.The main challenge of the project is to learn and apply the concepts related to general mechanics and LS-DYNA software. The experiment team is cross verifying the results given by doing the experiments and taking the observations from super slow motion camera.
   Guide:**Dr. P.K. Agnihotri**
3. **Robocon 2020, ABU Asia Pacific Robot Contest***
   I am currently the part of IIT Ropar Robocon 2020 team. My role in the team is to search and propose the different possible mechanisms and making SolidWorks model of the proposed mechanisms and designs. The design of the thrower was finalised and submitted by IIT Ropar team for Nationals.

WORKSHOPS ATTENDED

1. **ANSYS- LS-DYNA Workshop** *18, Feb'20-19, Feb.'20*
   The concepts related to simulations, mesh size, element types and other intensive things related to the software were introduced in this workshop.
2. **ROS workshop conducted by PunjRobotics** *1, Oct.'19 - 2, Oct'19 | | 11, Oct.'19*
   The workshop included ROS basics with basic commands in Lunix and explanation of how the world of ROS works. Some basic coding syntax related to ROS were discussed in the workshop and we also had some hands on experience on the robots that were working on raspberry pi systems.
3. **Manufacturing for Industry 4.0** *15, July'19 - 19, July'19*
   Included Very brief definitions and introductions to Modern manufacturing processes and systems, Additive manufacturing, CAD/CAM/CIM, Intelligent systems, Smart manufacturing, Sustainable manufacturing, Robotics, Cyber security, Communication, Internet of things, Policies, Ethics and Standards for industry 4.0
4. **MIT-D Lab Workshop** *14, Jan'20*
   The workshop was based on encountering different problems in Indian regions and providing a effective and practically implementable solution for the selected problem. I, along with the team proposed an idea which can solve problems related to education of children in small villages.

RELEVANT COURSES

Introduction to Computing and Data Structures	Material Science and engineering	Mechanical Workshop
Engineering Thermodynamics	Calculus	Differential Equations
Theory of machines*	Fluid Mechanics*	Solid Mechanics
Machine Drawing	Machine Learning(Coursera)*	

POSITION OF RESPONSIBILITIES AND CO-CURRICULAR ACTIVITIES

1. Serving as the coordinator of Automotive Club IIT ROPAR in the tenure 2019-2020.
2. Volunteered BAJA 2019 held at IIT ROPAR conducted by Mahindra & Mahindra.
3. Member of ARTURO, Photography Club, IIT Ropar.
4. Member of Alpha Productions, Video making club, IIT Ropar.

SOCIAL SERVICES

1. Awarded as best Volunteer in Pehchaan Ek Safar's Sunshine Masti to teach economically weak students. *May'19-July'19*
2. Volunteered and Donated Blood in Blood Donation Camp named Blood Connect.
3. Member of NSS (National Social Services).
4. **Designed and sold t-shirts** to generate revenue for charity

ACADEMIC ACHIEVEMENTS

1. First Runner-up of HY-Contest 2019 Conducted by HAI India.
2. Second Runner up of CADathon in IIT Ropar's ADVITIYA held on 31 march,2019.
3. Winner of the Barter Trading Competition held at PEC-FEST 2018 in Punjab Engineering College,Chandigarh.
4. Winner of ALGODOO competition held at IIT Ropar under Society of Mechanical Engineering(SME).
5. Got 5581 (Top 0.35%) rank in JEE advanced (conducted by IITs) and 5493 rank(Top 0.37%) in JEE mains (conducted by Govt. of India), about 1.1 million students appeared across India.

MISCELLANEOUS ACTIVITIES

1. Experienced in making research papers with proper formatting.
2. Designed Engine on SolidWorks under the course of Machine Drawing.
3. Designed and manufactured fighting Robot for Robowar event in Advitiya'19.
4. Event Head of event named "Off Road Asphalt" held at Advitiya'20.
5. Event coordinator of Dance event in Zeitgeist'19.
6. Participated in B-Roll making competition in IIT Delhi annual cultural fest.
7. Participated in PEC CAD events in PECFEST'19.

Referees

1. **Dr. Jitendra Prasad:** Associate Professor in Mechanical Engineering Department at Indian Institute of Technology, Ropar. (Email: jprasad@iitrpr.ac.in)
2. **Dr. Prabhat K. Agnihotri:** Assistant Professor in Mechanical Engineering Department at Indian Institute of Technology, Ropar. (Email: prabhat@iitrpr.ac.in)

**marked courses and skills are under progress*