

# Sadeep kumar

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## RESUME SUMMARY

I am a skilled Mechanical Engineering student at IIT Roorkee with expertise in data analytics, Excel, and marketing. Passionate about sustainable solutions, I have successfully led projects optimizing supply chains and investigating material behaviors. Eager to contribute to innovative engineering solutions in a dynamic environment.

## PERSONAL DETAILS

Current Location      Gopalganj  
Date of birth          January 25, 2001  
Gender                  Male

## EDUCATION

Graduation            B.Tech/B.E. ( Mechanical )  
                                Indian Institute of Technology, Roorkee with Score 5.523%  
Class XII                Bihar  
                                with 80.8% in 2019  
                                Achievements: School topper  
Class X                  Bihar  
                                with 72% in 2017  
Certification Course   Executive and DCS Certificate- NSS 2022-23  
                                Managers National Social Summit'23 ( January 2023 - Present )

## INTERSHIPS AND PROJECTS

Internships            **IRIS ECOTECH PRIVATE LIMITED** ( Duration June 2024 - July 2024 )  
                                I went to the waste management plant for field research. Where I found this following things: They want cheap and best technology to differentiate plastic and metal from its mixture. Also want the way for the large and constant supply of e-waste. How they can form balls of different types of plastic which upgrade their plastic quality. •They want a way to use inert segregated portion which is around 12 to 15 percent.

Projects                **Premixed flame speed for NH<sub>3</sub>-C<sub>7</sub>H<sub>16</sub> mixtures with various EGR at engine conditions** ( Duration September 2024 - November 2024 )  
                                Simulated the Laminar Flame speed, pressure, temperature and specific volume and tracked their variation for equimolar Ammonia-Heptane mixture  
                                Conducted the study for equivalence ratio, EGR and compression ratio in the range 0.6-1.4, 0%-30% and 6-14 respectively  
**Flow control using differentiable solver** ( Duration August 2024 - May 2025 )  
                                Use phiflow solver to solve the burger equation in space domain. Reduce the drag force on air plane wing which help save millions of dollars.  
                                Skills used - Python, CFD Modelling  
**Investigating the interplay between Volumetric change, dislocations and atomic potential energy in Al** ( Duration January 2024 - May 2024 )  
                                Explore the relationship between volumetric change, dislocations (defects), and atomic potential energy in Aluminium crystals, inspired by observations from shock simulations. Using Atomsk I constructed crystal structures of aluminium with various islocations, representing different defect configurations.  
**Supply Chain optimization of titan watch company India | Indian Institute Of Technology Roorkee** ( Duration August 2023 - December 2023 )  
                                Created a warehouse location for optimizing Supply chain for Titan company. I was responsible for the ideation and data collection of this project and meetings.  
                                Skills used - Python, Data Modeling  
**Sustainability in the plastic industry & Extended producers Responsibility** | ( Duration August 2023 - October 2023 )  
                                Created an application for Extended plastic producers. Using generative AI to develop frontend interface.  
                                Skills used - Prompt Engineering

## SKILLS AND ACHIEVEMENTS

Skills                    data analytics, ms office, excel, marketing, Power BI, Power Bi Analyst, Power Bi And Tableau Developer

Language	Hindi ( Both ), English ( Both )
Awards & Honor	Best member of the cell,NSS IIT ROORKEE