Sweety

UG (III Year I Semester)
B.Tech. (Mechanical Engineering)
Contact No: 9812483249
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Registration No: 22117138/2025

Indian Institute of Technology Roorkee

VERIFIED

Area of Interest

Data Analytics, Software Development, Database Management, Mechatronics

Education

Year	Degree/Examination	Institution/Board	CGPA/ Percentage
2024	B.Tech. 2nd Year	Indian Institute of Technology, Roorkee	8.261
2021	Intermediate (Class XII)	Sheetal Sports Sr Sec School (CBSE)	92.80 %
2019	Matriculate (Class X)	Sheetal Sports Sr Sec School (CBSE)	83.80 %

Projects

Social Media Platform | ArIES — May 2024 - June 2024

- Developed a full stack social media web application using MERN Stack .Implemented JWT to maintain user sessions.
- Used SQL and python for analyzing the data and implemented additional features.
- Integrated real-time chat functionality, enabling users to communicate instantly .
- Users can follow their friends and see the following posts , upload photos and videos , like and comment on posts, customize their profiles and able to view user profile.

Eigen value analysis of a Cantilever beam using finite element method | MIED , IIT Roorkee — August 2023 - November 2023

- Conducted modal analysis using finite element methods to determine natural frequencies and mode shapes of the beam.
- Utilized software such as ANSYS to model the beam, analyze stress distribution, deflection, and deformation under various loading conditions.

Cozmo Clench | ASME IIT Roorkee Student Section — May 2023 - August 2023

- Made a remote-controlled pick-and-place bot .
- Created a 3D model of the bot and gripper using SolidWorks . Assembled the 3d printed parts ofthemodel.
- Used servo motors for the gripping mechanism and flysky transmitter receiver for controlling the bot.

Autonomous Underwater Vehicle | ASME IIT Roorkee Student Section — August 2023 - April 2024

- Designed a gripper to precisely grab and release objects underwater. Gripper was modeled using SolidWorks, 3D printed, and carefully assembled to ensure seamless integration with the Autonomous underwater vehicle .
- Engineered gear mechanism driven by a servo motor, which allowed the gripper to open and close with exact control.

Awards / Scholarships / Academic Achievements

- Secured 8th Rank among 115 teams globally in SAUVC(Singapore Autonomous Underwater Vehicle Challenge) .

Skills

Computer languages	C++ , JavaScript , HTML/CSS ,SQL
Software Packages	ReactJS , NodeJS , ExpressJS , MongoDB , Solidworks ,Ansys
Languages Known	English (SRW) ,Hindi(SRW)

Positions of Responsibility & Extra Curriculars

Executive Member , Web development | Corporate Interactions Group — September 2023 - June 2024

- Led the development and enhancement of the group's website.
- Collaborated closely with corporate partners to enhance online presence and facilitate meaningful academia-industry interactions.

Executive Member | Student's Technical Council ,IIT Roorkee — June 2023 - Present

- Developed frontend for the Techshila website in collaboration with other developers.
- Implemented responsive design methods ensuring a smooth user experience across various devices.
- Actively contributed to diverse technical initiatives at IIT Roorkee with STC.
- Managed Inter-Bhawan Tech Meet.

Outreach and Relation Manager | ASME IIT Roorkee Student Section — May 2024 - Present

- Organized introductory talks and activities to engage with the community, ensuring regular communication of accurate information about club events.
- Participated in technical projects and took part in tech fests .

References

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Dr. Arup Kumar Das
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