



**Sugali Akash Naik**  
Bachelor of Technology  
in Mechanical Engineering  
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## EDUCATION

| Degree                 | Institute/Board                                | CGPA/Percentage     | Year      |
|------------------------|--|---------------------|-----------|
| Bachelor of Technology | Indian Institute of Technology, Ropar          | 5.92 (Till 4th Sem) | 2022-2026 |
| Class XII              | Andhra Pradesh board of Intermediate education | 86.8%               | 2022      |
| Class X                | Board of Secondary Education of Andhra Pradesh | 91%                 | 2020      |

## PROJECTS

- **Soft Robot Gripper for Patients with Diabetic Neuropathy** April 2024  
*ME205 - Design Lab-1 under Satwinder jit singh* **PPT Link**
  - Objective: Developed a manually controlled soft robot gripper to assist patients with diabetic neuropathy in handling objects.
  - Technical Features: Implemented 4 degrees of freedom: rotational (arm and car), translational (car in x and y axes).
  - Created a 3D printed mold for the gripper and a 4-way valve for uniform air distribution..
  - Challenges Overcome: Addressed issues of gripper leakages and faulty components by modifying the design and sealing leaks.
  - Adapted to molding problems with LSR by repairing and adjusting the gripper..
  - Speed Optimization: Reduced angular velocity using a 3:1 gear ratio, improving control precision..
  - Assembly and Integration: Assembled components and integrated servo motor with gear system for functional operation.
  - Outcome: Successfully created a functional, manually controlled gripper with adjustable speed and precise directional control, enhancing its usability for patients with diabetic neuropathy.

## TECHNICAL SKILLS

- **Programming Languages:** C, Python
- **Skills 2:** Abaqus
- **Skills 3:** Engineering Drawing

## KEY COURSES TAKEN

- **Maths:** Calculus , Differential Equations , Probability and Statistics
- **Core:** Engineering Mechanics, Introduction to Materials science and Engineering, Theory of Machines.

## POSITIONS OF RESPONSIBILITY

- **Representative,** Esportz club Jul. 2023- Jul. 2025
- **Coordinator,** Revanche Fest Jan. 2023

## MISCELLANEOUS

- **Merit in self defence,** Karate 2018 - 2019