Shauraya Aggarwal

■ shaurya.aggarwal.23@gmail.com J+91 98550 50747 GitHub URL In LinkedIn URL

EDUCATION

Thapar Institute of Engineering and Technology

Patiala, India

B. Tech in Mechatronics & Minor in CSE | Current CGPA: 8.2/10

September 2022 - present

Spring Dale Senior School

Amritsar, India

CBSE - Science (PCM) | 12th Percentage: 92%, 10th Percentage: 89% April 2009 - May 2022

EXPERIENCE

ELC Summer Internship 2024 | Project Lead

June-July 2024

- Created and **Optimised** a budget-friendly **autonomous mobile robot** that can be used for room **cleaning** purposes with an accuracy of **80 percentage**.
- Currently being used by University's Experiential Learning Center to teach **500+ students** every year about **microcontroller coding and electronics**.
- Ranked **First among 85** other projects from ELC Summer-internship 2024 in the Mechanical Department.

PROJECTS

Soil Mineral Testing System | Solidworks, Ardiuno IDE

Link!

• Developing a **compact scientific laboratory** to **collect and test** soil samples of different sites while being **mounted on an all-terrain vehicle**.

Robotic Hand Gripper | OpenCV, Solidworks, Matlab

Link!

• Researching and developing gesture-controlled hand grippers for long-distance surgeries.

Positions Of Responsibility

Mechatronics And Robotics Society | Mechanical Lead

August2024 - Present

- Guiding a team of **50 university students** in **CAD engineering and Manufacturing** to create robotics projects for the university.
- Looking after the mechanical aspects of all the projects under the society.

TECHNICAL SKILLS

Languages: C/C++, Python, OpenCV, Matlab

Tools / Frameworks: Solidworks, PTC Creo, AutoCAD, Ansys, Git/GitHub, Microsoft Excel, EasyEDA, Circuit Design, PCB layout, Industrial Design, VS code

Hardware Boards: Arduino, Esp32, Teensy 4.1, raspberry pi

Others: Problem-solving, Management, Communication, Team Work, Analytics

AWARDS AND ACHIEVEMENTS

• Designed a **Single boogie Mini Rover** and **4+2 DOF Robotic Arm** capable of navigating, diagnosing, and repairing electrical failures around the BITS campus. <u>Certificate!</u>

Finalist In International Rover Challenge 2024 | IRC 24 Coimbatore

January 2024

• Advanced to the finals beating a tough competition of **200+ teams** which takes place in a specially curated **Mars site** where finalists compete in multiple tasks for 4 days. Certificate!

Robotics Seminar for High School Students | Organiser and Speaker

February 2024

• Led interactive workshops for 50+ students, fostering engagement in hands-on engineering challenges improve learning outcomes while promoting interest in STEM fields. <u>Certificate!</u>