

AMIT KUMAR

Supaul, Bihar

+91-7654654776

amitikum9898@gmail.com

Linkedin

Github

Codeforces

LeetCode

EDUCATION

National Institute of Technology Allahabad, Prayagraj

2021 – 2025

B.Tech - Mechanical Engineering - **CGPA - 7.81**

Prayagraj, Uttar Pradesh

AREA OF INTEREST / COURSEWORK

- Data Structure & Algorithms
- Software Development
- Robotics & Control systems
- Basic SQL
- Front-end Development

PROJECTS

Cosmo Logistics | Python, ROS2, Nav2, SLAM, Gazebo, Rviz

Aug 2023 - Feb 2024

- Developed a logistics management system as part of the eYantra project using a UR5 Robotic Arm and a mobile Robot.
- UR5 Arm detects and localizes the boxes placed on racks, and picks and drops them avoiding collision.
- Ebot navigates autonomously using Lidar, SLAM and Nav2 integration to reach racks. Docks, picks and drops the rack before the arm.
- Successfully performed hardware testing on arm and Ebot at the warehouse in IIT Bombay.
- Achieved a significant improvement in delivery efficiency through optimized scheduling.

Smart Solar Panel | Solidworks, Arduino, Sensors, Microcontrollers

Jan 2023 - March 2023

- Designed a smart solar panel system capable of tracking the sun's movement to maximize energy capture.
- Used sensors and microcontrollers (Arduino) to automate panel adjustments.
- Utilized Solidworks to create detailed model of Solar Panel, ensuring efficiency and effectiveness in manufacturing.
- Increased energy efficiency by around 15% compared to static panels.

Personal Portfolio | HTML, CSS, Javascript

- Developed a fully responsive personal portfolio website using HTML, CSS, and JavaScript.
- Implemented smooth scrolling and animated content reveal using the ScrollReveal JavaScript library for enhanced user experience.
- Created an interactive projects section displaying detailed descriptions and GitHub links to individual projects with responsive image cards.

TECHNICAL SKILLS

Languages: C++, C, Python

Technologies/Frameworks: HTML5, CSS3, Javascript, ROS2(Robot operating system), Nav2, Gazebo simulator

Developer Tools: VS Code, Git, Github

CODING PLATFORMS

- Solved **230+** Problems on **Leetcode**.
- Solved **350+** Problems across **Codeforces** and **GeeksForGeeks**.

ACHIEVEMENTS

- Achieved a rank of **12** out of **345+** teams in E-Yantra robotics competition (e-YRC 2023) held by **IIT Bombay**.
- **Runner Up** in Guardian Drone competition held by Aero club MNNIT.