# Amit Kumar

Supaul, Bihar

<u>Unkedin</u> <u>Codeforces</u> <u>← LeetCode</u>

#### **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

• Full stack Development

#### **PROJECTS**

## Paste 🗷 | ReactJS, Redux Toolkit, Tailwind CSS

March 2024

- Built a React-based Paste App enabling users to create, edit, and manage notes or code snippets, with search and filter capabilities for efficient retrieval.
- Leveraged React.js, Redux Toolkit for state management, react-router-dom for navigation, and react-hot-toast for real-time notifications.
- Developed a responsive, modular UI with local storage support for offline access and interactive CRUD operations.
- Emphasized reusable components, robust error handling, and efficient use of hooks like useState and useEffect for maintainable and scalable architecture..

# ShopKart ☑ | ReactJS, Context API, Bootstrap

May 2024 - Ongoing

- Developed a full-stack e-commerce app using React.js, incorporating responsive design, user authentication, and dynamic content rendering for an optimized user experience.
- Implemented secure routing and access control with React Router and custom middleware, ensuring protected admin and user dashboards.
- Built an admin dashboard for managing products, categories, orders, and users, leveraging React and Node.js for dynamic updates and secure interactions.
- Optimized app performance with Context API for efficient state management in authentication, search, and cart functionalities.

#### Cosmo Logistics Z | 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.
- Achieved a significant improvement in delivery efficiency through optimized scheduling.

## TECHNICAL ŠKILLS

Languages: C++, C, Python

Technologies/Frameworks: HTML5, CSS3, Javascript, ReactJs, NodeJS, MongoDB, ROS2(Robot operating

system)

Developer Tools: VS Code, Git, Github, POSTMAN

# 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.