Rishabh Gupta

📍 Nashik, Maharashtra   ✉ rishabh.13.gup@gmail.com   📞 8668232675   in Rishabh Gupta   ⌂ RishabhGupta2005

Objective

Curious and driven undergraduate student pursuing **Computer Science Engineering**, with a strong foundation in **programming**, **data structures**, and **software development**. Keen to explore the intersection of *Artificial Intelligence*, *Machine Learning*, and **embedded systems**, with a passion for **integrating intelligent software with hardware solutions**.

Education

Vellore Institute of Technology, Vellore
B.Tech in Computer Science and Engineering   *2023 - 2027*
CGPA: 9.21

Matoshri Junior College, Nashik
Higher Secondary Certificate (HSC)   *Passed in 2023*

Wisdom High International School, Nashik
IGCSE (International General Certificate of Secondary Education)   *Passed in 2021*

Professional Experience

Armstrong Dematic - Robotics Intern
Jun 2025 - Jul 2025

- Worked on the **AMR Rigel 1500** in the Robotics R&D Department.
- Contributed to **ROS 2 Navigation (Nav2)** modules including path planning, localization, and recovery behaviors.
- Improved navigation performance and real-world deployment for autonomous mobile robots in warehouse automation.

Projects

AskDrAI |Intelligent Medical Chatbot

- Developed a **Flask REST API** to process symptoms and predict departments using CSV mappings + **Google FLAN-T5 LLM**.
- Integrated with **IBM Watsonx Assistant** for conversational interface and exposed APIs via **Ngrok/LocalTunnel**.
- Built a lightweight **Streamlit UI** for local testing and real-time interaction.

Robotic Arm with Joystick Control

- Controlled **servo motors** using Arduino Mega and dual joysticks.
- Implemented PWM-based smooth motion for precise control.

Manoeuvre |Rover with Gripper (IIT Kanpur Competition)

- Built a custom rover with a **servo-powered gripper** for object handling in IIT Kanpur's *Maneuver* robotics competition.
- Integrated **motor drivers, joysticks, and embedded logic**, optimized for terrain adaptability.

Team Experience

Team Veloce - Avionics Head & Member
2024 – Present

- Leading the **Avionics Division**, initiating UAV avionics and autonomous drone systems.
- Built a **line-following robot** and the **Manoeuvre Rover** (IIT Kanpur competition).
- Hands-on with **microcontrollers, sensors, real-time control**, and mechatronic systems.

Certifications

- **GenAI using IBM Watsonx** (CEWXAI1IN) - Certified by IBM (IBMCE), 2025

Technical Skills

Languages: C, C++, Java, Python, JavaScript, HTML, CSS
Technologies: VS Code, Arduino IDE, PyCharm, GitHub
Frameworks & Libraries: React, Pandas, NumPy