Omkar Dattatray Pawar

AI Robotics Intern

About Me

I am a second-year B.Tech student with a strong background in AI, Robotics, and Electronics . I have hands-on experience in building prototypes, applying Computer Vision for dataset training, and working with LiDAR, ROS, and path-planning algorithms. Additionally, I am fluent with many programming languages like Python, C, C++, Java. I am eager to apply my technical skills and my problem-solving curiosity in projects in AI and Robotics.

Education

- **Bachelor's Degree in Electronics And Computer Engineering (Present)**
  Vellore Institute Of Technology, Chennai, Tamil Nadu
  2023 - 2027

- **Higher Secondary Education**
  Army Public School, Kirkee
  CBSE Board, 2022-2023

Experience

- **College Team – Smart India Hackathon (2024)**

Team Lead —VIT Chennai — Sept 2024

- Created a project related to women safety in public places and public transport using Audio Processing and OpenCV. Qualified in top 25 out of 600 teams in college internal hackathon.

- **College Team – ISRO Robotics Challenge (2025) (upcoming)**

Projects Team Member — Chennai — Jan 2025 - Present

- Working on Autonomous Drone using LiDAR, OpenCV, MavLink, ROS2 and path planning.

- **College Team – Cozmoclench (Techfest IIT Bombay Prelims)**

Team Lead — Bangalore — Nov 2024

- Created a bot to pick and place objects using esp32 and esp8266. Learnt connectivity between esp32 and esp8266 using inbuilt Wi-Fi.

Skills

Python, C++, Embedded C, Verilog, ROS2, LiDAR, Autodesk TinkerCAD, OpenCV

Projects

- **EchoSafe — Women Safety Device**

- Created a device which process audio for detection for threats to women also using OpenCV for detection of any suspicious activity. The device consists of GPS and mobile connectivity with women's device and automated emergency notification system for increased safety.

- **Sun Tracking Solar Pannel**

- Create a Solar Pannel with 2 axis arm for 360 degree of freedom for a solar Pannel and using photodiode for sensors for detection of Sun and Arduino for processing of data and giving commands to servo.

- **Defence Rover — UGV for defence purpose**
  - Created a rover which can be used manually and autonomously. It had metal detector, person detection, inbuilt gun. Made up using raspberry3, Arduino as hardware and OpenCV and embedded C as software.

Contacts

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Languages Known

English, Hindi, Marathi