

DHRUV THAKKAR

+91 9359560985 ♦ Pune, Maharashtra

thakkardhruv52@gmail.com ♦ [Linkedin](#)

EDUCATION

Vishwakarma Institute of Technology

B.Tech. Computer Engineering

CGPA 8.78/10.00

Graduation Year 2025

Relevant Coursework DSA, OOPS, OS, CN

Skills ROS, ROS2, SLAM(Nav2), Python, C,Java, Mechatronics , Control Systems

PID(Serial/Cascaded),Mathematical modeling, LQR, Sensor-Fusion

Tools Git, Github, Jupyter,ROS2, Gazebo,Rviz, Arduino , Eagle, Coppeliasim

EXPERIENCE

Research Intern

Human Centered Robotics Lab, IIT Gandhinagar

Aug 2024 - Present

Prof. Vineet Vashishta

- Working on wearable sensors to predict Ground Reaction forces using Machine Learning

Summer Intern

Systems and Controls Department, IIT Bombay

June 2024 - Aug 2024

Prof. Vivek Natrajan

- Designed and controlled Double-Link Inverted Pendulum
- Non-linear control techniques, myRio, LabVIEW, CAD

Management Head

Team Quark

June 2023 - Present

Technical Club in VIT, Pune

- Lead a team of 70+ people in technical and non-technical events
- Managed Finance and database.

Research Head

ISA, VIT Pune

Sep 2022 - Feb 2023

- ROS, Moveit, SLAM, Computer Vision, Object Detection, Socket, Linux
- Jetson Nano, Raspberry pi, Embedded systems, Control Systems, Inverse Kinematics.

ACHIVEMENTS

- **AIR 3, eYRC-IIT Bombay 22-23.** in ROS based holonomic bot theme.([more](#))
- **AIR 4, eYRC-IIT Bombay 23-24.** in Omni wheel self-balancing bike theme. ([Github](#))

PROJECTS

Omni wheel Self-balancing bike Rotary Inverted pendulum based self balancing bike with LQR and Cascaded PID . ([GitHub](#))

Holonomic Art Bot Made a 3 wheeled holonomic art bot which was able to make complex locus and images on floor. It was mainly based on ROS. The project consisted Image Processing, control Systems, ROS, Socket Programming, Embedded C etc. ([more](#))

ADHIC: Autonomous Disinfectant Holonomic Interactive Cobot *Robot Localization and Mapping.* ADHIC: Autonomous ROS-based robot for disinfection using SLAM, LiDAR, and cameras for smart navigation and obstacle avoidance.

Chrome Extension for Google Sheets using NLP. Extensions that takes normal English commands as converted to format required for API using a custom trained NER(Named Entity Recognition model) ([GitHub](#))

Mental Health Chatbot. Chat bot using Transfer Learning and Fine tuning a pretrained chat model. ([GitHub](#))