



BRIEF SUMMARY

Dedicated TY ENT (Electronics and Telecommunication) Engineering student with a strong passion for exploring and learning new technologies in the field of electronics. Particularly skilled and enthusiastic about UAV systems, with a keen interest in applying theoretical knowledge through hands-on, practical experience. Eager to take on dynamic roles that challenge me to grow and continuously improve. Always ready to contribute to innovative projects that expand my knowledge and push my limits.

KEY EXPERTISE

Arduino ESP Fusion 360 UAV Xilinx ISE Tinkercad Proteus KiCAD Soldering NI Multisim Photography

EDUCATION

MIT Academy of Engineering, Pune

2023 - 2027

B.Tech. - Electronics and Telecommunication Engineering | CGPA: 8.12 / 10

Municipal College malkapur, Malkapur

2023

12th | MSBSHSE | Percentage: 79.50 / 100

St Ann's English Medium High School, Khamgaon

2021

10th | MSBSHSE | Percentage: 92.60 / 100

AWARDS AND SCHOLARSHIPS

- TFWS

INTERNSHIPS

MIT Academy of Engineering | Aviation / Aerospace

12 Jan, 2024 - Present

Electronics Engineer and Drone Pilot

Key Skills: ArduPilot INAV Betaflight UAV Design

In this Internship I am Building various types of Quad Copters. Worked on HexaCopter and race class FPV drones. The Internship Exposed me to the various open source UAV firmware works

GNL Electronics Pvt. Ltd | Core Electrical Engineering / Manufacturing

02 Jun, 2025 - 30 Jul, 2025

PCB Designer

Key Skills:

understand and work with microcontroller practice programming and debugging in Keil µVision IDE
manufacture and design PCB on software To gain knowledge about PCB manufacturing process

The internship at GNL Electronics Pvt. Ltd. provided hands-on experience in PCB design and embedded systems. I successfully designed, fabricated, and tested a microcontroller board using the Nuvoton N76E003, while learning PCB layout, Gerber file generation, and programming with Keil IDE and Nu-Link programmer. This experience bridged the gap between theory and practical industrial application, preparing me for future electronics projects.

PROJECTS

Microcontroller

02 Jun, 2025 - 31 Jul, 2025

Mentor: Mr. Navlesh Gawale | **Team Size:** 4

Key Skills: KiCAD Fabrication PCB Design

We developed a functioning microcontroller board using the Nuvoton N76E003 microcontroller IC. We first designed the schematic in KiCad, followed by the PCB layout. After completing the design, we exported the Gerber files and used them to fabricate the PCB. The process included laminating the copper clad, etching, drilling holes, applying solder mask, performing silkscreen printing, and finally soldering the components using a heating pad. Once assembled, we tested the microcontroller by interfacing it with the Nu-Link programmer. Using Keil software, we successfully programmed the board and executed multiple test codes, including blinking the onboard LED and UART communication.

02 Feb, 2024 - 05 Jun, 2024

Saline Monitoring System

Mentor: Mr. Vinayak Kulkarni

Key Skills: ESP Simulation Blynk

In this project we designed the saline monitoring system which calculates the weight of the saline bottle and if the saline water is low it will sent a message to a caretaker or a doctor to change the bottle.

Automatic Plant watering System

01 Oct, 2023 - 06 Dec, 2023

Mentor: Mr. Vishal Puranik | **Team Size:** 3

Key Skills: Blynk ESP 3D Modeling

Me make a plant watering mechanism which senses the moisture level of the soil and if the moisture level is below threshold it will water the plant as well as it sends the message to the owner through blynk and owner can also see the moisture level and can control when to water the plant through the Blynk

FPV Drone

Mentor: Dr. Subrata Bhowmik | **Team Size:** 5

Key Skills: Drone Pioleting Skill Debugging Problems Programming Soldering Datasheet Reading

We made a FPV Drone for the Inter college and National Compitions like 3" Freestyle drone 5" freestyle Drone , 5" Race class drone etc

HexaCopter

Mentor: Mr. R. K. Patil | **Team Size:** 7

Key Skills: Programming Team work Flying

We made a autonomous flying Hexacopter Drone which can lift a weight of 1.5-2 kg

Breadth monitoring Tool using Ultrasonic sensor

Mentor: Dr. Usha Verma | **Team Size:** 3

Key Skills: Arduino UNO Soldering Circuit Design 3D Modeling Fusion 360

This project demonstrates expertise in integrating ultrasonic sensing with Arduino for accurate, real-time chest-movement detection. It involves implementing filtering and calibration techniques to extract clean, noise-free breathing data. The work highlights skills in LED-based visual feedback design and live waveform visualization using the Serial Plotter. It also reflects practical knowledge of wearable system design, power handling, and stable sensor mounting.

ACHIEVEMENTS

- o 1st Rank in Drone Compition at Army Institute of Technology, Dighi
- o 2nd in Rotor Rogue LoS compition at VIT Chennai 2025
- o 1st Rank at Robotex Event help at MIT ADT 2024
- o 2nd in Rotor Rush FPV compition at VIT Chennai 2025
- o 1st in Mindspark Drone Compition held at COEP 2025
- o 1st in Drone Compition held at AISSMS 2025

POSITIONS OF RESPONSIBILITY

Drone Pilot - Drone Club MITAoE

Drone Pilot for the drone Club MIT form January 2023 and many prizes for drone racing Compitation till date.

CO-CURRICULAR ACTIVITIES

- o Drone Building, Drone Dynamic.

PERSONAL INTERESTS / HOBBIES

- o Gaming
- o Trekking

PERSONAL DETAILS

Gender: Male

Marital Status: Single

Current Address: Near Gajanan Maharaj Sansthan, Pune, Maharashtra, India - 412105

Emails: bodadekaushal@gmail.com , 202301070080@mitaoe.ac.in

Date of Birth: 24 Aug, 2004

Known Languages: English, Marathi, Hindi

Permanent Address: Aashirwad electronics Near vitthal mandir, Nandura, Maharashtra, India - 443404

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