Mayur Shantaram Patil

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PROFESSIONAL SUMMARY

Electronics & Telecommunication Engineering graduate with strong foundation in embedded systems, real-time hardware interfacing, and sensor-based automation. Experienced with Raspberry Pi, Arduino, and ESP32 boards, with practical knowledge of UART, SPI, I2C, and GPIO protocols. Developed and deployed real-world safety and IoT solutions using Python and Embedded C. Fast learner with leadership in national-level competitions, eager to contribute to embedded product development and hardware innovation.

EDUCATION

Bachelor of Engineering, SPPU	CGPA:7.88/10	2021-2025
Electronics & Telecommunication		
HSC, Maharashtra State Board	Percentage: 85.50%	2020 - 2021
SSC, Maharashtra State Board	Percentage: 76.60%	2018 - 2019

SKILLS

Embedded Systems & Hardware Raspberry PI, PCB Design, GPIO, Arduino, UART, SPI, I2C protocols, ADC.

Programming Skills Python, Java, PHP, SQL, JavaScript, Embedded C.

Technical ToolsVisual Studio Code, KiCAD, Proteus, Multisim, Circuit Designer. **Soft Skills**Communication, Teamwork, Analytical Thinking, Leadership Quality.

Languages English, Hindi, Marathi.

INTERNSHIP

NUTSHELL INFOTECH PVT. LTD

Nashik, MH

Oct 23 - Jan 24

IoT Developer Intern

- Developed an automated plastic bottle sorting system using **Raspberry Pi**, **camera module**, and **Python** (**OpenCV**) to detect and classify bottles based on visual characteristics.
- Interfaced sensors and actuators via **GPIO**, implementing real-time object detection with **edge-based AI logic** for fast response and offline operation.
- Designed a local dashboard for real-time visualization and integrated **Firebase** for cloud data logging and remote monitoring.

PROJECTS

Advanced Vehicle Safety System (AVSS): Designed and implemented a comprehensive safety system using Raspberry Pi and microcontrollers. Features include driver authentication (fingerprint), drowsiness detection, accident alerting, and alcohol sensing. Integrated sensors using UART, SPI, and I2C, programmed in Embedded C and Python, with real-time data updates.

IOT based Hostel Access and Attendance System: A smart IoT-based solution for secure hostel access and automated attendance, enhancing convenience and management efficiency and Secure authentication and automatic attendance system using **RFID & network-based logging**, enhancing campus security.

AI BASED DRONE FOR HUMAN DETECTION WITH PAYLOAD DROPPING: I developed a Human Detection System using OpenCV and embedded systems, winning our college Hackathon and presenting it at the Avishkar Zonal Competition (Key Skills: Aerodynamics, Drone technology, OpenCV, Python).

EXTRA-CURRICULAR ACTIVITIES

• Represented my Project AVSS at Nationals in Bhopal at **National Level** YUVA conclave with YI (Young Indians) and CII across TOP 5 participants from India.

- Currently Campus Ambassador of KPIT as a student representator for Institute.
- Worked as a post of Academic Secretary in TE.
- Participated in University Level AVISHKAR in year 2024-25
- Organized various technical and non-technical events in Institute.

CERTIFICATIONS & ACHIVEMENTS

Avishkar University Level Competition - Avishkar	Dec 2024
Fundamental of Java Programming - Cousera	Oct 2023
AWS - Cloud Essentials Knowledge - AWS	Jan 2024
 Data Analysis Using Python by IBM - Cousera 	Nov 2023
Avishkar Zonal Level Competition - Avishkar	Oct 2023
Communication Skill development - Infosys Springboard	Sep 2023
Learning JAVA 11 - LinkedIn Learning	Aug 2024
Cybersecurity Job Simulation - Mastercard	Jul 2024