

Punam Thakur

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Education

VIT Bhopal University

BTech ECE (AI and Cybernetics)

Cumulative GPA: **9.03/10**

Bhopal, Madhya Pradesh

Expected June 2026

12th Standard

Govt. Girls Higher Secondary School

MPBSE

Cumulative percentage: **90.6%**

Jobat Alirajpur MP

May 2022

10th Standard

Govt. Girls Higher Secondary School

MPBSE

Cumulative percentage: **88%**

Jobat Alirajpur MP

May 2020

Technical Skills and Tools

C, C++, SQL, Embedded Systems, IOT, Wokwi, LTspice

Projects

Sign Language to speech conversion System

Feb 2024 - May 2024

- Description: Designed a smart glove that interprets predefined hand gestures by utilizing flex sensors, which detect the bending of fingers. The glove transmits the captured gesture data via Bluetooth, enabling real-time conversion into speech. This project strengthened skills in Embedded C programming, Arduino-based development.
- Technology: Arduino IDE, C++.
- Role: Hardware integration and Code the system.
- Link: <https://github.com/PUNAM1357THAKUR/Sign-Language-To-Speech-Conversion-System>

Home Automation System

Jan 2025 – Mar 2025

- Embedded Systems– Developed a flexible smart home system that integrates temperature, ultrasonic, and LDR sensors with an ESP32 microcontroller. The system intelligently adjusts the environment in real time based on sensor data. It also allows remote control of appliances.
- Technologies: ESP32, Ultrasonic, LDR, Temperature Sensor, Fan, C++.
- Role: Embedded logic design, sensor fusion, and integration
- Link: <https://github.com/PUNAM1357THAKUR/Smart-Home-Automation/tree/main>

The Rider's co-pilot: An intelligent assistant for smarter riding

Aug 2025 - Ongoing

- Description: This project is Raspberry Pi-based smart safety system for motorcycles. It automatically verifies rider safety and prevents ignition if any unsafe condition is detected. The system uses a wireless link to check three critical factors Helmet Usage -Using IR sensor, Alcohol & Breath Analysis-Using MQ3 and Co2 Sensor, Drowsiness Detection- OpenCV
- Technology: C++, OpenCV, Raspberry Pi, IOT
- Role: Hardware integration and Code the system.
- Link: <https://github.com/PUNAM1357THAKUR/The-Rider-s-co-pilot-An-intelligent-assistant-for-smarter-riding-.git>

Experience

Embedded System Design Internship-Maven Silicon

Jan 2025-Mar 2025

- Developed embedded firmware and hardware interfacing for a home automation project.
- Improved skill level in microcontroller-based system design and embedded programming.
- Link- <https://drive.google.com/file/d/13VzNIHwmC7YB2Sn5zKaNjKI3vowemfgS/view?usp=sharing>

Extracurricular Activities

- Participated in Techfest IIT Bombay's Workshop on Electric Vehicles (Sept 2023).
- Volunteered for attending the ANRF-sponsored National Symposium on Innovations in Intelligent Systems at (Feb 2024).
- Worked as a team member in the ROBOX event at AdVITYa 24.

Achievements

- Awarded with Dreamed STAR Scholarship from VIT Bhopal.
- Secured first position in district merit in class 12th.

Certifications & Training

- Applied Machine Learning in Python (Coursera 2023).
- Embedded System Design Certification (Maven Silicon 2025)

Additional Information

Languages: English, Hindi

Hobbies: Poetry, Playing Badminton