

# Ayush Billore

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## EDUCATION

<b>VIT Bhopal University</b>		Bhopal, Madhya Pradesh
B.Tech in Electronics and Communication Engineering	CGPA: 9.01/10	Expected June 2026
<b>LNP Govt. Higher Secondary School</b>		Harda, Madhya Pradesh
Class XII	Percentage: 93.0%	May 2022
<b>LNP Govt. Higher Secondary School</b>		Harda, Madhya Pradesh
Class X	Percentage: 96.5%	May 2020

## TECHNICAL SKILLS

- **Programming Languages:** Java, C, Embedded C, SQL
- **Tools:** ESP32, Arduino, Blynk IoT, LTSpice, Tinkercad, Keil, Arduino IDE
- **Coursework:** Embedded Systems, IoT, Microcontrollers

## ACADEMIC PROJECTS

### Aquatic Life Monitoring System June 2023-Aug 2023

Embedded Systems & IoT

- Developed an innovative solution to help maintain healthy aquatic environments by automatically measuring important water quality parameters such as TDS, pH, and turbidity. Achieved **90% accuracy** in real-time measurement through sensor calibration. The system also provides early warnings when parameters exceed safe thresholds.
- **Technologies:** TDS Sensor, pH Sensor, Turbidity Sensor, ESP32, Arduino IDE, C++. [GitHub].
- **Role:** Embedded logic design, sensor fusion, and integration.

### IoT-Based Garbage Level Monitoring System July 2024-Sep 2024

Embedded Systems & IoT

- Designed a real-time garbage monitoring system using ultrasonic sensors with an ESP32 to accurately detect waste levels. After calibration, the system achieved **88% accuracy** and transmitted data over Wi-Fi to the Blynk cloud platform, providing live visualization. This solution helps optimize waste management.
- **Technologies:** ESP32, Arduino UNO, Ultrasonic Sensor, Blynk IoT, C++. [GitHub].
- **Role:** Sensor integration, calibration, and firmware development.

### Home Automation System Jan 2025-April 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, achieving **80% accuracy** in maintaining optimal conditions based on sensor data. It also allows remote control of appliances.
- **Technologies:** ESP32, Ultrasonic, LDR, Temperature Sensor, Fan, C++. [GitHub].
- **Role:** Embedded logic design, sensor fusion, and integration.

## EXPERIENCE

### Embedded System Design Internship Maven Silicon

Externship

Jan 2025-April 2025

- Completed an externship remotely with Maven Silicon, where I worked on a “Home Automation” project focusing on embedded solution design and implementation. During this experience, I enhanced my skills in microcontroller interfacing and Embedded C programming. [Drive].

## CODING

- Solved **400+** problems on GeeksforGeeks.

## EXTRA-CURRICULAR & ACHIEVEMENTS

- Awarded the “STARS” Scheme Scholarship by VIT Bhopal
- 1st Rank in District (12th), 2nd Rank in District (10th)
- Finalist in VITB Unplugged

## ADDITIONAL INFORMATION

- **Languages:** English, Hindi
- **Hobbies:** Watching and Playing Cricket, Mobile Gaming