Ganit Yadav

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Education

VIT Bhopal University, Madhya Pradesh **Sept 2023 – Ongoing**
B.Tech in Electronics and Communication Engineering CGPA: **9.24/10**

Technical Skills

- **Languages**: C++, Embedded C, Python, Java.
- **Tools**: MATLAB, LTspice, Arduino, ESP32.

Academic Projects

Visitor Notification and Smart Locking System | *ESP32-CAM, Telegram Bot, LCD, Solenoid Lock* **Jan 2025 - May 2025**

- Developed an IoT-based visitor notification system using ESP32-CAM to capture visitor images and transmit them securely to a mobile device via a Telegram Bot.
- Implemented a push-button–based image capture mechanism, while enabling remote door locking and unlocking exclusively through Telegram commands (`/lock`, `/unlock`).
- Integrated an external LCD display to show real-time availability status and custom messages, enhancing visitor communication and user awareness.
- Role: Software and Hardware Integrator. GitHub

Smart Irrigation Monitoring System | *ESP32, IoT, Blynk, DHT11, Soil Moisture Sensor* **Sep 2024 - Dec 2024**

- Designed and developed an IoT-based smart irrigation system using ESP32 to monitor soil moisture and environmental parameters in real time.
- Implemented automatic motor ON/OFF control based on predefined threshold values of soil moisture and DHT11 sensor readings to ensure optimal irrigation.
- Enabled remote monitoring and control through the Blynk IoT platform, allowing users to track sensor data and system status in real time.
- Role: ESP32 Logic Development. GitHub

Obstacle Detection System for Visually Impaired | *Arduino, Ultrasonic Sensor, Buzzer* **May 2025 – July 2025**

- Developed an embedded system–based assistive solution for visually impaired individuals to detect nearby obstacles using ultrasonic sensing technology.
- Implemented real-time distance measurement by calculating echo time of ultrasonic waves reflected from obstacles.
- Designed a distance-based alert mechanism where buzzer frequency dynamically increases as the obstacle distance decreases, providing intuitive real-time feedback.
- Role: Software and Hardware Integrator. GitHub

Externship

Embedded System Design Internship — Maven Silicon — May 2025 – July 2025
Developed the "Obstacle Detection for Visually Impaired" project using Arduino and ultrasonic sensors with buzzer alerts. Gained hands-on experience in embedded programming, sensor integration, and user-centric IoT design.

Certificate

Certifications

Introduction to Internet of Things – NPTEL Certificate
C Programming – NPTEL Certificate

Achievements & Co-Curricular Activities

District Topper – MP Board Result 2023.
Honoured with **100%** scholarship under the **"STARS SCHEME"** at VIT Bhopal.
Solved **300+** problems on LeetCode.
Solved **400+** problems on GeeksForGeeks.

Additional Information

Hobbies: Playing Cricket.
Languages: English, Hindi.