# GHANSHYAM PATIDAR

Address: Indore,Madhya Pradesh,India
Email | Linkedin | GitHub
Email: ghanshyampatidar151@gmail.com | Mobile: 9109317117

## CAREER OBJECTIVE

Enthusiastic and detail-oriented Electronics and Telecommunication engineering student with hands-on experience in embedded systems, microcontroller programming, and real-time application development. Seeking an Embedded Systems role to apply my skills in C/C++,Python and hardware integration for innovative product development.

## EDUCATION

**Madhav Institute of Technology and Science** — Gwalior,Madhya Pradesh
*B.Tech In Electronics and Telecommunication ( CGPA- 8.33 )* — *Aug- 2020 –July 2024*

**Jawahar Navodaya Vidyalaya** — Neemuch,Madhya Pradesh
*12th - ( percentage- 71.40 )* — *2019*

**Jawahar Navodaya Vidyalaya** — Neemuch,Madhya Pradesh
*10th - ( CGPA- 8.80 )* — *2017*

## TECHNICAL SKILLS

| | | |
|---|---|---|
| **Languages** | : | C/C++, Embedded C, Basic Python. |
| **Tech.Knowledge** | : | ARM7(Lpc2129,Lpc2148), Esp32-S3, 8051 Micro Controller, Zephyr RTOS, Linux, OOPs, Data Structures. |
| **Protocols** | : | UART, I2C , SPI, CAN . |
| **Tools** | : | Vscode, Keil uVision4, Proteus. |

## EXPERIENCE

**1. Delta IoT Solutions** — [Duration- Ongoing]
*( Embedded System Engineer )*
Worked on the ESP32-S3 microcontroller using the Zephyr real-time operating system (RTOS) and Visual Studio Code. I created programs that interact with sensors and other hardware parts. I also learned how to run multiple tasks at the same time and manage memory efficiently using Zephyr.

**2. Vector India Pvt. Ltd** — [sep 2024 - may 2025]
*( Embedded System Trainee )*
Completed training at Vector India Pvt Ltd with a focus on embedded systems and real-time application development Trained in embedded system architecture, firmware development, and real-time applications.Worked with microcontrollers (8051, ARM7), interfaced hardware components, and developed embedded C/C++ applications.

## PROJECTS

**1. Data-driven vehicle control using CAN protocol** — Source Code

- Developed a real-time embedded system for vehicle control using CAN protocol, integrating multiple functional nodes like temperature monitoring, reverse alert, and window glass control.
- Utilized LPC2129 microcontroller and peripherals such as DS18B20 (temperature sensor), GP2D12 (proximity sensor), and external interrupts to achieve accurate sensor data acquisition and control.
- Programmed in Embedded C using Keil uVision and Flash Magic, implementing modular code for sensor interfacing, interrupt handling, and communication.

**2. Medicine Reminder System** — Source Code

- Purpose: Develop a medicine reminder system that ensures users take medicines on time through customizable schedules and alerts.
- Core Features: Display real-time clock (RTC) data (date and time) on an LCD, Enable RTC settings adjustments using a 4x4 matrix keypad. Allow users to set and manage multiple medicine schedules.
- Alert Mechanism: Provide timely alerts using switches and a buzzer when the current time matches any scheduled medicine time.

**3. Train Ticket Booking App** Source Code

- Developed a Train Ticket Booking App with features like Sign-in/Sign-up, ticket booking, cancellation, train availability checking, and user-friendly menu, utilizing C programming and file handling techniques.
- Implemented dynamic memory allocation using structure pointers and Singly Linked Lists (SLL) to manage train and passenger data effectively.
- Enhanced usability and modularity by creating user-defined functions for each task, using union, typedefs, and separate header files for better project structure.

**4. Bank and Shopping Application** Source Code

- Designed and implemented a Bank and Shopping Application in C++ with functionalities like deposit, withdrawal, balance inquiry, and shopping cart management, showcasing modular and object-oriented programming skills.
- Integrated advanced features like 'Pay Bill' as a friend function, enabling seamless interaction between the Bank and Shopping Application while ensuring password verification for secure transactions.
- Emphasized data security and validation by incorporating features like password authentication and secure billing for reliable user operations.

## CERTIFICATIONS

- Problem Sloving Assessment By HackerRank
- TCS Codevita season 11 Rank Certificate
- Spark 2021 With Yoga Magics by Holistic Club

## EXTRA-CURRICULAR ACTIVITIES

- Participate in Emerging Technology Quiz competition-a National level quiz-competition organized by IETE student section MITS.
- Core Team Member Of Fitness Club MITS

## HOBBIES

- Exploring New Technologies
- Board Games
- Playing Cricket