$root > Gulshan Kumar Rana

$ TRAINEE ENGINEER

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$ vi Skills.c

```c
const Languages[] = { "C", "C++", "Embedded C", "Unix" };
class Embedded {
    char Microcontroller[] = "LPC2129";
    char Device Drivers[] = {"UART","I2C","SPI","CAN","ADC" }; //using interrupts.
};
class Linux {
    const Networking[] = {"TCP", "UDP", "Sockets (using C syscalls)"};
    const IPC[] = {"Semaphore", "Message Queue", "Shared Memory", "Pipe/FIFO", "Signals"};
};
```

$ vi Professional_Experience.c

IT Technician, PIIT Services Pvt Ltd. │ Gwalior, MP   **Feb 2023 – Sep 2024**

- **[FEATURE]** Managing infrastructure of **300+** system, deploying private **exam** and **voip** servers.
- **[PERFORMANCE]** Scaled and maintained the setup in different locations **(Mumbai, Pune, Nagpur, Gwalior, Jabalpur)** to **200+** system each.

$ vi Education

B-TECH (ECE) │ Rustamji Institute of Technology (RJIT) │ Gwalior, MP   **Sep 2020 – June 2024**

- B-Tech in Electronics & Communication.
  - **[Major Project]**: Object Detection System using Arduino UNO.

$ vi Awards.c
> **3rd Prize in Hackthon organised by Vector India**

Project : Real Time IOT data collection using LPC2129
- **[FEATURE]** Real time interaction with the **LPC2129** microcontroller using **HTTP** and **C Sockets** custom libraries to set the baud rate to communicate using **UART.**
- **[Tech Stack]** **C Sockets (TCP)** , **UART, HTTP, LPC2129.**

$ vi Projects.c

→ Project: Decoupled_UNIX_Socket_Logging_Daemon
A robust logging system that uses high-speed, local **inter-process communication** (IPC) to reliably stream application logs to a separate, dedicated persistence daemon.
- **[System Calls]**: **socket(), bind(), sendto(), recvfrom(), unlink(), fopen(), close()**
- **[Features]**: By using a non-blocking **UNIX** socket to instantly hand off log data to a separate, dedicated logger daemon, the main application minimizes the risk of losing critical crash-time messages that would otherwise be stuck in its memory buffers.
- **[Link]**: github.com/protectmango/Linux_Labs/

→ Project: Real_Time_Dashboard_using_CAN
A simple implementation to utilize different protocoal **(SPI, UART, CAN, ADC)** and interrupts to acheive a simple Car Dashboard prototype.
- **[Features]**: Utilising **Embedded C** projects that uses **CAN**, **External Interrupts, Registers, and Timers** to create real time dashboard using **LPC2129**.
- **[Link]**: github.com/protectmango/ARMTDMI-Programming/

→ Project: C_Student_Database
A Real time database that perform **READ, ADD, EDIT, DELETE** with a beautiful **CLI** using basic C.
- **[Features]**: My first C projects that utilises **strings**, **file**, **structure** to create a minimal student database.
- **[Link]**: github.com/protectmango/C_Basic_To_Advance/

→ Project: Custom_String_Datatype_Using_C++
*A simple implementation to understand **Operator Overloading**, **Function Overloading**,and **Copy Contructor** .
- **[Features]**: A simple C++ projects that utilises **constructor**, **operator**, **class** to create a custom String datatype.