PROFESSIONAL SUMMARY

B.Tech Electronics & Communication Engineering student with project-based experience in embedded systems and IoT using ESP8266/ESP32. Proficient in microcontroller programming (AVR, PIC, ARM), PCB layout, and circuit simulation. Completed multiple automation and monitoring systems using Blynk, PLX-DAQ, and ThinkSpeak. Seeking an entry-level role in Embedded Systems or IoT development to apply hands-on skills in microcontroller integration and real-time data processing.

EDUCATION

B. Tech in Electronics & Communication Engineering

Guru Jambheshwar University of Science & Technology (GJUS&T), Hisar Expected Graduation: June 2026

HS-CIT Certification in Information Technology

Haryana Board of School Education & HKCL Awarded July 2019 – Score: 91.15%

Class 12th CBSE (April 2020 – March 2021)
Montessori Convent Sr. Sec. School, Satnali

Class 10th CBSE (April 2018 – March 2019)
Montessori Convent Sr. Sec. School, Satnali

TECHNICAL SKILLS

- Programming: C, Embedded C, Assembly, Verilog
- Microcontrollers: Arduino UNO, ATmega8, ESP8266, ESP32, PIC16F877A, ARM Cortex-M4, ARM7
- Tools & IDEs: MPLAB X, Arduino IDE, Proteus, LTSpice, ExpressPCB, Keil, PSpice, Visual Studio
- Concepts: Embedded Systems, IoT, PCB Design, Circuit Design, Signal Processing, UART, SPI, I2C
- Soft Skills: Technical presentation, Teamwork, Documentation

PROJECTS

1. Home Automation System using ESP8266 & Blynk

• Modeled a Wi-Fi-based automation system to control 4 household appliances via smartphone using Blynk app and ESP8266, improving user convenience by 90%.

2. Temperature Monitoring System with ThinkSpeak

 Built a real-time temperature logger using DHT11 sensor and ThinkSpeak, updating data every 15 seconds for continuous monitoring.

3. UART Communication Between Two ESP8266 Modules

• Implemented reliable UART communication with 9600 baud rate between 2 ESP8266 modules to exchange sensor data with <1% packet loss.

4. Weather Monitoring with Arduino Uno

• Integrated 3 environmental sensors (DHT11, LDR, BMP180) to display temperature, light, and pressure with ±2°C accuracy.

5. RFID Based Automatic Attendance System with PLX-DAQ

• Logged attendance of 30+ users automatically using RFID module and PLX-DAQ Excel interfacing.

6. AC to DC Power Supply – PCB Design

• Simulated and built an AC to DC converter circuit in Proteus with final PCB layout ready for fabrication.

7. Audio Amplifier Using BC547 – PCB Implementation

• Engineered a single-stage audio amplifier circuit (gain $\approx 100x$) and fabricated a 5x5 cm PCB layout.

8. 4-bit Multiplier in CMOS Logic using LTSpice

Simulated 4-bit binary multiplier circuit using CMOS logic gates with correct outputs verified for all 16 combinations.

TRAININGS

Embedded System Design with ATmega8

Sofkon India Pvt. Ltd, New Delhi | Jun-Aug 2024

Hands-on training in ATmega8 programming, peripheral interfacing, timers, and interrupts using Proteus and MPLAB X IDE.

Arduino and Arduino IDE

Internshala Trainings | Feb-Mar 2024

Learned embedded programming and real-time control using Arduino. Completed multiple automation-based tasks.

• Embedded Systems Fundamentals

Pantech AI, Online | Mar-Apr 2024

Explored system architecture, microcontroller interfacing, and applications using PIC, ARM Cortex-M4, ARM7, and ESP8266.

CERTIFICATIONS

- HS-CIT (Haryana State Certificate in Information Technology)
- Embedded System Design (Sofkon India Pvt. Ltd)
- Embedded Systems (Pantech AI)
- Arduino & Embedded Systems (Internshala)

ACTIVITIES & WORKSHOPS

- Project Exhibition Participant GJUS&T, Sept 2024
- Anti-Ragging Awareness Event Volunteer GJUS&T, Oct 2024
- Group Dance Performer, Swagatam 2024 (University Event) GJUS&T, Oct 2024
- EV Workshop Participant Autokriti, NIT Kurukshetra, Oct 2025
- **IoT Workshop Participant** GJUS&T, March 2025
- Founder & Manager Paper Curls (Educational Platform), Jul 2023

LANGUAGES

• Hindi: Native

• English: Working Proficiency

HOBBIES

- Travel
- Robotics
- Tech Blogging