NITESH SHARMA

✉ niteshsrma014@gmail.com 📍 Kathmandu, Nepal 🔗 My Portfolio in LinkedIn

PROFILE

- Electronics and Telecommunication Engineer with experience in circuit design and simulation using MATLAB, Multisim, and Cisco Packet Tracer; skilled in embedded systems, microcontrollers, and wireless protocols.
- Proven problem-solver with a track record in IoT and automation projects using sensors and real-time systems; quick learner with strong technical communication and reporting skills.

PROFESSIONAL EXPERIENCE

SmartKnower, *AI & IoT Applications Trainee*   10/2024 – 01/2025 | Bengaluru, India
- Designed and implemented a smart home system using Arduino and ESP8266, enabling wireless control of lights and appliances via a mobile app.
- Integrated sensors and Wi-Fi modules to monitor environmental data, improving remote usability by 80% during testing.

Zunkiree Technologies, *Telecom Engineering Intern*   02/2023 – 04/2023 | Kathmandu, Nepal
- Assisted in designing and testing communication networks, troubleshooting hardware interface issues using oscilloscopes and signal testers.
- Collaborated on optimizing tower layouts for LTE networks, reducing coverage gaps by 15% in simulated models.

PROJECTS

Smart Agriculture System   03/2024 – 05/2024
- Engineered a smart agriculture solution using DHT11 and soil moisture sensors with Arduino to capture real-time field data.
- Automated irrigation response logic based on sensor thresholds, reducing manual watering needs by approx. 50% in prototype tests

Smart Home Automation using IoT
- Designed and implemented a smart home system using Arduino and ESP8266, enabling wireless control of lights and appliances via a mobile app.
- Integrated sensors and Wi-Fi modules to monitor environmental data, improving remote usability by 80% during testing.

Wireless Communication Range Optimization
- Simulated wireless signal propagation in MATLAB and LabVIEW for GSM, LTE, and Wi-Fi protocols, evaluating antenna configurations for optimal range.
- Improved simulated signal strength by 30% through parameter tuning and environmental modeling.

Image Steganography
- Embedded hidden metadata text into PNG images using Python steganography libraries, ensuring no perceptible changes to visual quality. Resulted in secure and undetectable data embedding for image-based communication.

EDUCATION

B.M.S College of Engineering, *B.E.(Bachelor of Engineering) in Electronics and Telecommunication Engineering* 🔗   06/2020 – 07/2024 | Bengaluru, India

GoldenGate International College,   2017 – 2019 | Kathmandu, Nepal
Higher Secondary (+2) in Science – Computer Science Major

SKILLS

Simulation & Design Tools — MATLAB, Simulink, Multisim, LabVIEW, Cisco Packet

Technologies & Components — Arduino, ESP8266, DHT11, ICs, Transistors, Sensors, Python

Wireless Protocols — GSM, LTE, Wi-Fi, Bluetooth

Core Areas — Circuit Design, Embedded Systems, Signal Processing, PCB Layout, IoT Integration

Documentation — Technical Reports, Schematic Diagrams, Presentation Materials

Soft Skills — Problem-Solving, Team Collaboration, Quick Learning, Time Management, Communication

CERTIFICATES

Intro to Artificial Intelligence – Online Certification │ Python Programming – Udemy │
Crash Course in Image Processing – Great Learning │ AWS Cloud Fundamentals – Great Learning │ Arduino workshop

EXTRA-CURRICULAR ACTIVITIES

- Coordinated a college-level tech fest event on Embedded Systems.
- Received "Best Project" recognition for Smart Home Automation system.