



# PRASAD GANESH HINGANE

B.Tech. - Electronics & Computer Engineering  
- MIT ADT - School of Engineering

Ph: +91-8625003462

Email: hinganeprasad8@gmail.com

Pune, Maharashtra, India - 411028

LinkedIn: [https://www.linkedin.com/in/prasad-hingane-3634742a2?](https://www.linkedin.com/in/prasad-hingane-3634742a2?utm_source=share_via&utm_content=profile&utm_medium=member_android)

[utm\\_source=share\\_via&utm\\_content=profile&utm\\_medium=member\\_android](https://www.linkedin.com/in/prasad-hingane-3634742a2?utm_source=share_via&utm_content=profile&utm_medium=member_android)



## PROFESSIONAL SUMMARY

I am a B.Tech student in Electronics & Computer Engineering at MIT ADT University with interests in Embedded Systems, IoT, LoRa Communication, and Cybersecurity. I have hands-on experience developing ESP32 and Arduino-based projects involving wireless communication, automation, GPS tracking, and sensor integration.

I have worked on projects such as Sentinel Command Network (SCN), SilentTalk Morse Code Messaging Gloves, and Arduino Based Fire and Smoke Alert and Automatic Extinguisher with GSM800L SMS Alert. My work includes LoRa communication, IoT networking, sensor interfacing, and embedded programming.

I have published a research paper on SCN in the International Journal of Innovative Research in Technology and participated in Smart India Hackathon (SIH) projects. I am also certified in Ethical Hacking, Cybersecurity with AI, and IoT technologies.

I am seeking opportunities in Embedded Systems, IoT Development, Wireless Communication, and Cybersecurity where I can apply my technical and problem-solving skills to real-world engineering challenges.

## KEY EXPERTISE

Embedded Systems, IoT, LoRa Communication, Cybersecurity, Network Security, Hardware Prototyping

## EDUCATION

### MIT ADT - School of Engineering

2023 - 2027

B.Tech. - Electronics & Computer Engineering - MIT ADT - School of Engineering | CGPA: 7.24 / 10

### Rayat Shikshan Sanstha's S.M. Joshi College, Pune

2023

12<sup>th</sup> | MSBSE | Percentage: 55 / 100

### Sardar Dastur Hoshang Boys High School, Pune

2021

10<sup>th</sup> | MSBSE | Percentage: 72.60 / 100

## AWARDS AND SCHOLARSHIPS

- 3rd Prize – Best Paper Presentation: Secured 3rd place in the Electronics and Communication Engineering track at ISIGTT 2026 for presenting the Sentinel Command Network (SCN).
- Smart India Hackathon (SIH) 2025 Participant: Participated in the internal rounds of SIH 2025 with Team Meshtastic and Team Resonnex, working on innovative IoT and communication-based solutions.

## PROJECTS

### SilentTalk: ESP32-Based Morse Code Messaging Gloves

10 Jun, 2025 - 21 Nov, 2025

Mentor: Prof. Dnyaneshwar Kokare | Team Size: 4

Key Skills: ESP32, Embedded Systems, Morse Code Communication, OLED Display, Wireless Communication, LoRa

Project Link: <https://wokwi.com/projects/440266474173896705>

Developed a wearable silent communication system using ESP32-based smart gloves for Morse code messaging without internet or Wi-Fi connectivity. Integrated OLED display output, wireless data transmission, and Morse code encoding/decoding for emergency and assistive communication applications.

### Fire & Smoke Detection System using GSM

01 Jan, 2025 - 30 Apr, 2025

Mentor: Prof. Deepika Pede | Team Size: 4

Key Skills: Arduino, MQ2 Sensor, GSM Module, Relay Control, Embedded Systems

Developed an automated fire and smoke detection system using Arduino and MQ2 sensors. The system activates a relay-controlled water pump and sends SMS alerts through a GSM module during emergency situations.

### Sentinel Command Network (SCN)

Mentor: Prof. Dr. Sachin Patil | Team Size: 4

**Key Skills:** ESP32, LoRa Communication, GPS Tracking, Health Monitoring, IoT, Embedded Systems

Developed a wearable tactical communication and monitoring system using ESP32 and LoRa technology for long-range communication without internet connectivity. Integrated GPS tracking, health monitoring, Morse code-based messaging, and relay communication for defense and emergency applications.

### MESHTASTIC: Decentralized Peer Communication & Resource Coordination System

**Mentor:** Prof. Rohan Shinde | **Team Size:** 6

**Key Skills:** ESP32, LoRa, Mesh Networking, GPS, AES Encryption, IoT

Developed a decentralized mesh communication system using ESP32 and LoRa technology for emergency coordination and GPS-based SOS messaging in crowded environments. Implemented encrypted communication and self-healing mesh networking for reliable low-power communication.

## PUBLICATIONS / RESEARCH / WHITE PAPERS

### An Integrated Secure Communication System for Modern Soldier Connectivity using Sentinel Command Network

12 May, 2026

**Journal** | International Journal of Innovative Research in Technology (IJIRT) - Volume 12 Issue 12 | **Mentor:** Prof. Dr. Sachin Patil  
| **No. of Authors:** 5

**Key Skills:** LoRa Communication, GPS Tracking, ESP32, Health Monitoring, Morse Code Messaging

Published a research paper on the Sentinel Command Network (SCN), a wearable long-range communication system designed for defense and emergency applications. The system integrates ESP32, LoRa communication, GPS tracking, and health monitoring with Morse code-based secure communication and relay networking.

### ARDUINO BASED FIRE AND SMOKE ALERT AND AUTOMATIC EXTINGUISHER WITH GSM800L SMS ALERT

12 Aug, 2025

**Other** | Copyright Office, Government of India (Reg No: LD-20250171073) | **Mentor:** Prof. Deepika Pede | **No. of Authors:** 4

**Key Skills:** Embedded Systems, Arduino, GSM Module, Sensor Integration, Automation

Received Copyright Registration from the Government of India for an automated fire and smoke detection system using Arduino, MQ2 sensors, relay control, and GSM800L SMS alert technology for emergency response applications.

## ACHIEVEMENTS

- Published research paper titled "An Integrated Secure Communication System for Modern Soldier Connectivity using Sentinel Command Network" in International Journal of Innovative Research in Technology (IJIRT, May 2026).
- Received Copyright Registration from the Government of India for "Arduino Based Fire and Smoke Alert and Automatic Extinguisher with GSM800L SMS Alert" (Reg No: LD-20250171073, Aug 2025).
- Recognized as a Top Performer in the 8-week Cyber Security with AI industrial training program conducted by Internshala and IITM Pravartak Technologies Foundation (April 2026).
- Awarded Grade 'A' in the Ethical Hacking with AI certification program under Skill India NSDC (April 2026).

## ASSESSMENTS / CERTIFICATIONS

### 3rd Prize for Best Paper Presentation - 8th International Symposium on Innovative Global Technology Trends

**Provider:** MIT Art, Design & Technology University, Pune

**Key Skills:** Technical Writing, Research Presentation, Public Speaking, Embedded Systems

Awarded 3rd Prize for Best Paper Presentation in the Electronics and Communication Engineering track at ISIGTT 2026 for presenting the Sentinel Command Network (SCN).

### Foundations of Cybersecurity

**Provider:** Google (via Coursera)

**Key Skills:** Network Security, Risk Management, Threat Detection, Security Controls

Completed a foundational cybersecurity certification covering security principles, network threats, risk mitigation, and data protection concepts.

### Certificate Program on Underwater Domain Awareness (UDA)

**Provider:** Ratan Tata Maharashtra State Skills University (RT-MSSU), Mumbai

**Key Skills:** Maritime Security, Acoustic Sensing, Oceanography, Strategic Surveillance

Completed a specialized program on underwater domain technologies, maritime security, and acoustic sensing applications.

### Network Security

**Provider:** Great Learning

**Key Skills:** Cryptography, Firewall Configuration, Traffic Monitoring, Secure Communication

Completed a certification focused on network security concepts, cryptography, firewall implementation, and secure data transmission.

## SEMINARS / TRAININGS / WORKSHOPS

**Internet of Things (IoT) and Industrial IoT Institute Name:** MIT ADT - School of Engineering 06 Apr, 2026 - 10 Apr, 2026

**Key Skills:** IoT, Industrial IoT, ESP32, Blynk Cloud, Sensors, Automation

Completed training on IoT, Industrial IoT, cloud integration, sensor interfacing, and automation systems using ESP32 and Blynk Cloud.

**Cyber Security with AI - 8-Week Industrial Training** 14 Feb, 2026 - 09 Apr, 2026

**Institute Name:** Internshala Trainings in association with IITM Pravartak

**Key Skills:** VAPT, OWASP Top 10, Threat Detection, Information Security

Completed industrial training on cybersecurity fundamentals, VAPT, OWASP vulnerabilities, and AI-based threat analysis. Recognized as a Top Performer.

**Ethical Hacking with AI - Skill India NSDC Certified** 14 Feb, 2026 - 09 Apr, 2026

**Institute Name:** Scholiverse Educare Private Limited (Internshala)

**Key Skills:** Ethical Hacking, Penetration Testing, Risk Assessment, Defensive Security

Completed certification training in ethical hacking and AI-driven cybersecurity techniques. Awarded Grade 'A' performance.

**Deloitte Cyber Job Simulation** 01 Nov, 2025 - 19 Nov, 2025

**Institute Name:** Deloitte (via Forage)

**Key Skills:** Log Analysis, Threat Detection, Incident Response, Network Monitoring

Completed a cybersecurity job simulation focused on threat detection, network monitoring, and security analysis.

**Smart India Hackathon (SIH) 2025** 15 Sep, 2025 - 16 Sep, 2025

**Institute Name:** MIT ADT University

**Key Skills:** Rapid Prototyping, IoT Networks, Team Collaboration, Problem Solving

Participated in Internal Smart India Hackathon (SIH) 2025 with Team Meshtastic and Team Resonnex for innovative IoT and communication-based solutions.

**CRIEYA Pre-Incubation Program**

**Institute Name:** CRIEYA

**Key Skills:** Innovation, Embedded Systems, IoT, Project Development

Participated in innovation and startup pre-incubation activities focused on embedded systems and fire detection projects.

## CO-CURRICULAR ACTIVITIES

- Completed certifications in Cybersecurity, Network Security, and Underwater Domain Awareness (UDA).
- Participated in Deloitte Cyber Job Simulation focused on log analysis and intrusion detection.
- Attended workshops and seminars on IoT, Embedded Systems, Network Security, and AI-driven cybersecurity techniques.

## EXTRA CURRICULAR ACTIVITIES

- Participated in fort conservation and cleanliness drives.
- Assisted in intramural sports organizing activities.
- Volunteered in campus cultural events and technical activities.

## PERSONAL INTERESTS / HOBBIES

- Trekking and Nature Exploration
- Recreational Sports and Physical Fitness

## PERSONAL DETAILS

**Gender:** Male

**Marital Status:** Single

**Current Address:** F - 10 , Chourang Residency Satavwadi  
Hadapsar, Pune, Maharashtra, India - 411028

**Emails:** hinganeprasad8@gmail.com , hinganeprasad994@gmail.com

**Date of Birth:** 06 Sep, 2005

**Known Languages:** English, Hindi , Marathi .

**Phone Numbers:** +91-8625003462, +91-8862020087