Shruti Shah

shrutishah1304@gmail.com https://www.linkedin.com/in/shruti-shah13
+91 9423309277 | Pune, India

Electronics and Telecommunication Engineering student with hands-on experience in embedded systems, IoT hardware design, and machine learning applications. Skilled in ESP32 development, RFID systems, industrial sensors, and signal conditioning circuits. Experienced in developing data acquisition systems and integrating hardware with cloud dashboards for real-time monitoring.

EDUCATION

AISSMS College of Engineering, Pune, Maharashtra **Nov 22- April 26**

Bachelors of Engineering, Electronics & Telecommunication **CGPA - 8.50**
Courses: *Electronics, Communication System, Database Management, Microcontrollers, Analogue & Digital Circuits*

SKILLS

- **Tools & Software:** Proteus, Multisim, MATLAB, Arduino IDE, TensorFlow, Scikit-learn, VS Code
- **Hardware Skills:** Industrial Sensors, Microcontroller Programming, Signal Conditioning, Circuit Design, Hardware Debugging, Precision Soldering
- **Simulation & Control:** Proteus Simulation, Circuit Analysis, PCB Testing
- **Programming & Databases:** C, C++, Python, Java, SQL, MySQL
- **Certification:** AWS Cloud Practitioner Essentials | AWS skill builder

WORK EXPERIENCE

Design and Development Intern, Twintech Control Systems Pvt.Ltd |PUNE, INDIA
December 24 – January 25

- Designed a PT100 based temperature measurement system achieving 95 percent accuracy across the 0 to 100 C range.
- Implemented calibration and signal conditioning techniques to reduce measurement error by 20 percent.
- Assembled and tested TC400 voltage-to-frequency converter circuits for stable signal processing.
- Performed precision soldering and systematic circuit testing to improve hardware reliability.

Machine Learning Intern, Mallikarjuna Infosys | PUNE, INDIA
July 24 – September 24

- Completed training in machine learning model development using Python, TensorFlow, and Scikit-learn.
- Worked on data preprocessing, feature engineering, and dataset analysis.
- Implemented supervised and unsupervised learning models for classification tasks.
- Gained experience in building end-to-end machine learning workflows and API integrations.

PROJECTS

Fleet Management & Engine Health Monitoring System| Major Project (Ongoing)

- Developed an IoT based engine monitoring system using ESP32 and OBD-II data acquisition.
- Collected parameters such as RPM, engine load, oil quality, and air quality for predictive diagnostics.
- Built a machine learning model to classify engine health conditions.
- Designed a cloud dashboard for real-time visualization and alert generation.

Smart Inventory Management System | Mini Project

- Built an RFID based inventory tracking system integrated with Python Flask and MySQL database.
- Implemented dual scanning modes (manual and RFID) to improve identification speed by 60 percent.
- Enabled real time inventory monitoring and automated low stock alerts.

Proximity Card Detector | ASKpro Solutions

- Developed an RFID authentication system using ESP32 microcontroller.
- Implemented access logic in Embedded C for secure card verification.
- Achieved 97 percent tag recognition accuracy with response time under 200 milliseconds.
- Simulated and validated circuit design using Proteus.

EXTRACURRICULAR ACTIVITIES

- **State Level Shooter:** Selected for Thal Sainik Camp (TSC) under NCC, representing at the state level in shooting competitions.
- **Inter-department Sports Competitions:** Participated in cricket, basketball, and badminton tournaments.
- **Robin Hood Army Volunteer:** Contributed to community food distribution initiatives.
- **Engineering Today Volunteer:** Assisted in technical magazine publication and campus engineering events.