

A. Saikamal

Embedded design engineer with experience in developing and testing drone and embedded applications. Skilled in microcontrollers, sensor interfacing, communication protocols and system debugging, with a focus on reliable, real-world performance.

Zion Cottage Hanuman nagar
Tarnaka ,Hyderabad , 500007
9347053394
saikamald3@gmail.com

EXPERIENCE

Reliable Techno Systems , Hyderabad— *Embedded Engineer*

April 2025 - PRESENT

Hands-on experience in embedded C development on ESP32 and microcontrollers, drone system integration, sensor interfacing using I2C/SPI/UART, and system modeling and analysis.

EDUCATION

Gokaraju Rangaraju Institute of Engineering and Technology , Hyderabad — *B.Tech - Electronics and Communication Engineering*

NOV 2021 - MAY 2025

CGPA : 8.6

Narayana Junior College , Hyderabad — *Intermediate -MPC*

JUNE 2019-April 2021

Percentage : 98%

PROJECTS

Autonomous Mission-Oriented UAV System — *Reliable Techno Systems*

An autonomous UAV was developed with sensor-based state estimation, closed-loop control for stabilization, and mission-level navigation. The system was validated through integration testing and real-world flight trials to ensure robustness and performance.

Aerial UAV Mitigation Using Net-Based Capture- *Reliable Techno Systems*

A defensive UAV system was developed to mitigate unauthorized drones using a net-based capture mechanism, with emphasis on controlled interception, stability during close-range maneuvering, and reliable deployment.

Technical Skills

- **Programming & Firmware:**
Embedded C
- **Microcontrollers & Hardware:**
ESP32, STM32, Microcontrollers, Sensors (IMU, GPS)
- **Communication Protocols:**
I2C, SPI, UART
- **Drone & Control Systems:**
Flight control systems, PID control, UAV system integration
- **Tools & Simulation:**
MATLAB Simulink, Mission planner , Ardupilot ,Arduino IDE,Easy EDA & testing tools
- **Debugging & Testing:**
Firmware debugging, hardware–software integration, system validation

LANGUAGES

- English
- Hindi
- Telugu