ROBOOST SOLUTIONS

Industrial IoT, Embedded Systems, AI & Advanced Electronic Solutions

CORPORATE MISSION

To engineer robust, scalable, and intelligent automation systems by integrating **Industrial IoT, Embedded Electronics, AI-based analytics, and advanced electronic design**, helping industries achieve higher reliability, operational visibility, and data-driven optimization.

COMPANY PROFILE

Roboost Solutions is a technology engineering company delivering **industrial IoT systems, embedded control solutions, AI-driven monitoring platforms, and complete electronic system development**. We specialize in transforming conventional machines and infrastructure into **connected, data-aware, and intelligently monitored ecosystems**.

In addition to IoT and automation, we also provide **comprehensive electronic product design and development solutions**, covering sensor systems, control electronics, inspection systems, and specialized industrial devices. Our solutions combine precision sensing, real-time data acquisition, secure communication networks, and intelligent processing to support predictive maintenance, performance optimization, and automated control.

CORE TECHNICAL COMPETENCIES

- **Embedded System Engineering:** Microcontroller-based systems, real-time sensor interfacing, industrial signal conditioning

- **Industrial IoT Architecture:** Secure device-to-cloud communication using MQTT, GSM, WiFi, and LPWAN

- **Data Acquisition & Monitoring:** High-resolution sampling, telemetry streaming, and trend analysis

- **AI & Predictive Analytics:** Anomaly detection, equipment health analysis, predictive maintenance modeling

- **Automation & Control Systems:** Sensor-driven logic, adaptive control, and remote supervisory integration

ADVANCED ELECTRONIC SOLUTIONS

- Blockage and leakage checking systems

- Fuel filling and dispensing control systems

- Pollution and emission checking machines

- Remote billing and data logging systems

- Telecom infrastructure and BTS security systems

- Medical and diagnostic electronic equipment

- Industrial temperature sensing systems

- Tire inflator and pressure control systems

- Custom inspection and testing machines

- Vision-based inspection systems

- Industrial data acquisition and data logger units

- Slot sensors, IR remote systems, and eddy current sensing solutions

INDUSTRIAL IoT & AUTOMATION SOLUTIONS

- Machine condition monitoring (Temperature, vibration, current, RPM)

- Energy and power monitoring systems

- Environmental and safety monitoring

- Water level and smart irrigation automation

- Process monitoring for industrial operations

SYSTEM ARCHITECTURE APPROACH

Our architecture includes a **Sensor Layer**, **Edge Processing Layer**, **Secure Communication Layer**, **Cloud & Analytics Layer**, and **Alert & Control Layer**, ensuring scalability, modularity, and industrial reliability.

QUALITY & RELIABILITY FOCUS

Roboost Solutions emphasizes **stable firmware, calibrated sensing systems, secure communication protocols, and field-ready industrial design** to ensure dependable deployment and long operational life.

Roboost Solutions – Engineering Intelligent Automation for a Smarter World