Pintu Shaw
Phone: 8100651869 Email: shwpintu53@gmail.com
LinkedIn: inkedin.com/in/er-pintu-shaw-226529112

Embedded Systems Engineer (5+ years) skilled in firmware development, PCB design, and IoT solutions. Experienced with **ATMega series, ESP32, STM32**, using **Atmel Studio & Arduino IDE**. Worked on **UART, SPI, I2C, RS485** interfaces and IoT protocols **HTTP/HTTPS, MQTT, WebSocket**. Currently exploring basic web & app development using AI tools to create innovative tech solutions.

EDUCATION

- **B.Tech in Electrical & Electronics Engineering – MAKAUT University (2019)**
- **Higher Secondary (12th), WBCHSE (2014)**
- **Secondary (10th), WBBSE (2011)**

TECHNICAL SKILL

- **Microcontrollers: Arduino, ESP32, AVR, STM32**
- **Languages: Embedded C**
- **IoT & Connectivity: MQTT, HTTP,**
- **GSM, Wi-Fi, LAN, WebSocket**
- **PCB Design Tools: Proteus**
- **Simulation Tools: Proteus**
- **Others: Web Page using AI Tools**

CERTIFICATION

- **Embedded Microcontroller & Basics Robotics & PCB Designing**
- **IoT Developer**

Academic Projects

- **Smart Trashbin**
- **Industrial Control & Automation System**

Industrial Projects

- **Fire & Burglar Alarm System**
- **Smart Coffee Vending Machine**
- **Industrial 6 DOF Arm controller**
- **3.3KWatt EV Charger**
- **Texecom Panel GSM Card**
- **Smart IoT Auto Dialer Series**
  - **MQTT Based**
  - **HTTPS Based**
- **ComIP Running**

Work Experience:

Company: Chandrani Compliments & Exports Pvt. Ltd
Post: Jr. Project Developer
8th Nov, 2019

My role involved developing Fire & Burglar Alarm Control Panels**,** including firmware and hardware functionality. I was responsible for prototype electronic circuit design and PCB development, along with testing and validation. Additionally, I performed reverse engineering to redesign or modify existing circuits and PCBs for improvements and optimization.

22nd Aug, 2020

Company: IECT Electronics
Post: Robotics Trainer & Project Developer
27th Sep, 2021

My key role was to train students with a technical background in Basic Robotics, Basic Electronics, Microcontroller programming (C language), and PCB Design. Along with training, I also developed projects received from external clients. Major projects delivered include:

1. Smart IoT Coffee Machine (QR-based Access Control)
2. EV Charger (Smart power management & control system)
3. 6-DOF Robotic Arm Controller (Microcontroller-based)

5th Aug, 2024

Company: Security Engineers Pvt. Ltd
Post: Hardware Design Engineers
2nd Sep,2024

In this role, I am responsible for designing IoT-enabled hardware products. The objective is to convert existing non-IoT Fire Alarm and Burglar Alarm systems into IoT-capable devices by developing communication and remote monitoring modules. My responsibilities include hardware design, schematic + PCB development, firmware development, testing, and field integration.

Projects Completed:

1. GSM Card for Texecom Fire/Burglar Panel.
2. IoT-Based Auto Dialer Series (Cloud Monitoring Solutions)
   - MQTT-Based Auto Dialer
   - HTTPS API-Based Auto Dialer
3. ComIP Module (In Progress)

Present