Manish Kumar

manish123.ggn@gmail.com (+91) 9891510401

Career Objective

To seek a challenging position in the area of Embedded Hardware Design to evolve continually with the organization goals.

Work Experience

Senior Embedded Hardware Engineer — **Intozi Tech Private Limited**
Mar 2022 – contd.

Embedded Hardware Engineer — **Intozi Tech Private Limited**
Mar 2021 – Mar 2022.

Embedded Design Engineer — **IBG Data Analytics and Software LLP**
Dec 2019 – Mar 2021.

Embedded Hardware Engineer — **Ahoy Systems Private Limited**
Jun 2018 – Nov 2019.

Technical Competencies

- Research in projects according to customer requirement.
- Make Architecture, design and component libraries.
- Prepare Schematics, Layout and BOM
- Final designing and fault finding in PCB and circuit.
- Reduced manufacturing costs and functionality by updating existing products.
- Make prototype, board bringup and hardware debugging
- Hands on experience with soldering Iron, multimeter, Oscilloscope.
- Prepare reports and test plan of hardware
- Strategic Planning for Product Development Cycle and manage delivery timeline.

Projects

ANPR Toll and Parking Camera
- Interfacing of modules, sensors, camera and IR with developer kits and working on heat transfer from IP67 enclosure.

LoRa/LoRaWAN Smart Streetlight
- It involves a combination of sensors.These devices can detect movement that enables dynamic lighting and dimming, all surrounding lights will brighten until movement is no longer captured and it also allows neighboring fixtures to communicate with each other through LoRa and LoRaWAN communication.

Smart people counter
- People counter using TOF sensor and data manipulation in cloud using wireless protocol.

ATM surveillance
- Sensor reading using NONC switch and also embedded with modbus keypad for security and communicates through WIFI.

GPS Tracker
- Battery powered device which have accelerometer,GPS and various sensors communicates through LoRa and LoRaWAN communication.

WiFi - 4G/NBIoT Platform
- ESP32 based WiFi platform with 4G or NBIoT connectivity for industrial applications along with various sensors and battery backup.

Robot Rover - B.Tech Project
- Interfacing servo motor, dc motor, camera and many sensor with the arduino mega and raspberry pi and following are the features that we worked on this device: Handshake, Face Detection, Object Detection.

🖐 Skills

PCB Design Software	Autodesk Eagle, Cadence Allegro(Learning phase)
Wireless Communication	LoRa, WiFi, GSM, Bluetooth, 4G
Wired Protocols	RS485, UART, ADC, I2C, SPI, Ethernet
Microcontrollers	STM32, ESP32, ESP8266, Raspberry PICO
IDEs	Arduino, Thonny
Developer Kits	NVIDIA Jetson Nano, NVIDIA Jetson NX, Raspberry Pi

📚 Education

Maharaja Surajmal Institute of Technology (GGSIPU) **2015-2018**
B.Tech - Electronics and Communication Engineering overall percentage : 73.52

Shree Sai Institute of Engineering and Technology (HSBTE) **2011-2014**
Diploma - Electronics and Communication Engineering overall percentage : 67.03

📚 Personal Information

Father's Name	Mr. Dalip Kumar
Mother's Name	Mrs. Deepika
Birthplace	Gurugram, Haryana
Date of Birth	December 03, 1996
Martial Status	Single
Permanent Address	H.No 18, Block -J, Ashok Vihar-II, Gurugram (Haryana)-122001

Declaration

I hereby declare that the above information provided are true to best of my knowledge.

Date: May 04, 2022 **Manish Kumar**
Place: Gurugram