

Suraj Kumar

Electronics Engineer

+918892043890

2011eec31@smvdu.ac.in

<https://in.linkedin.com/pub/suraj-kumar/b8/3b8/a8a>



Thank you for your attention,

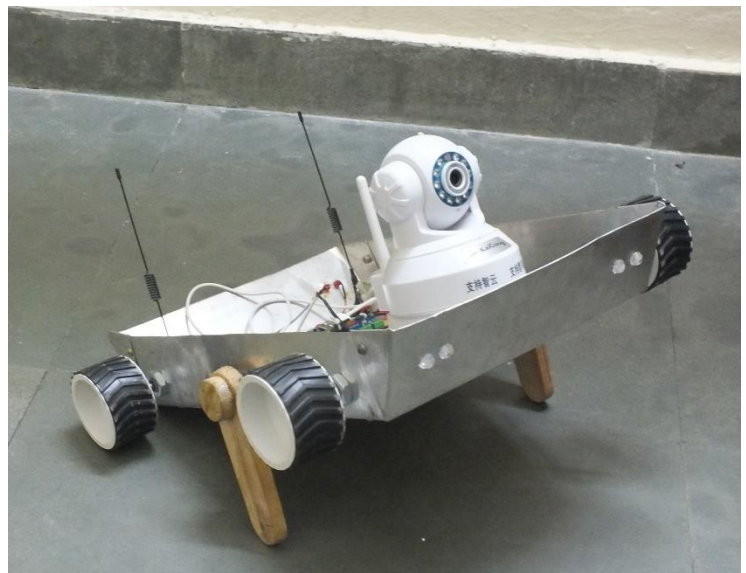
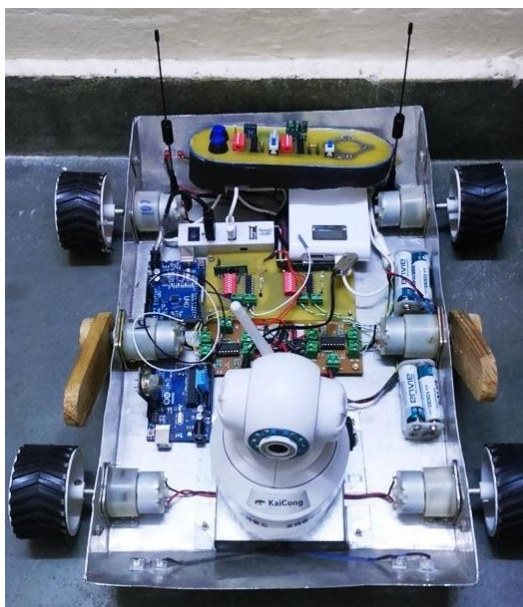
Please examine my finished projects.

I am ready to answer any questions, thanks!

Knowledge and Technology

- Expert in complicated **Single & Multi-layer PCBs** with both **SMT & PTH Technology**.
- Proficient in **schematic capture** and **PCB layout** using **EDA Tools: Altium, OrCAD, Eagle** etc
- Development & management of **Schematic Symbol & Layout Footprint CAD Library**.
- Expert in **Arduino, Raspberry Pi** both **Interfacing and Programming**.
- Expert in **Analog and Digital Circuit Designing** and simulations.
- Done more than 20 major Embedded system projects having **ARM, 8051 family, Cortex-M3, Atmel Processors**

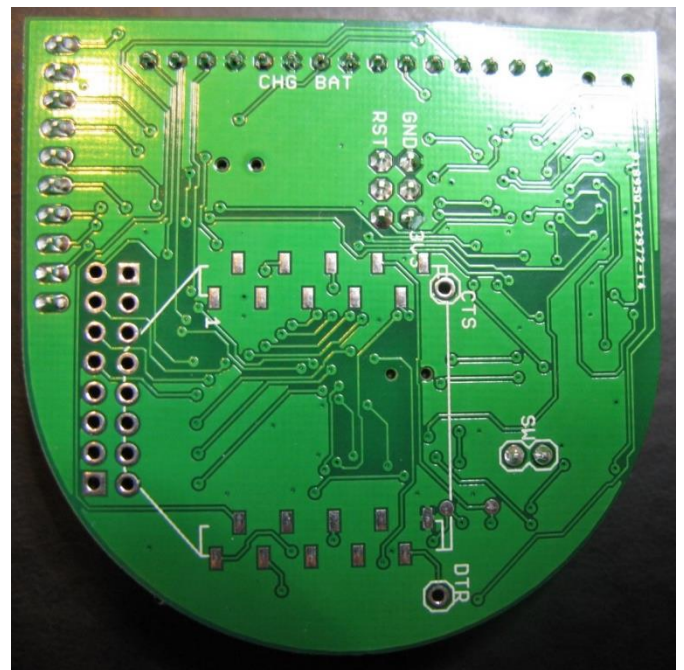
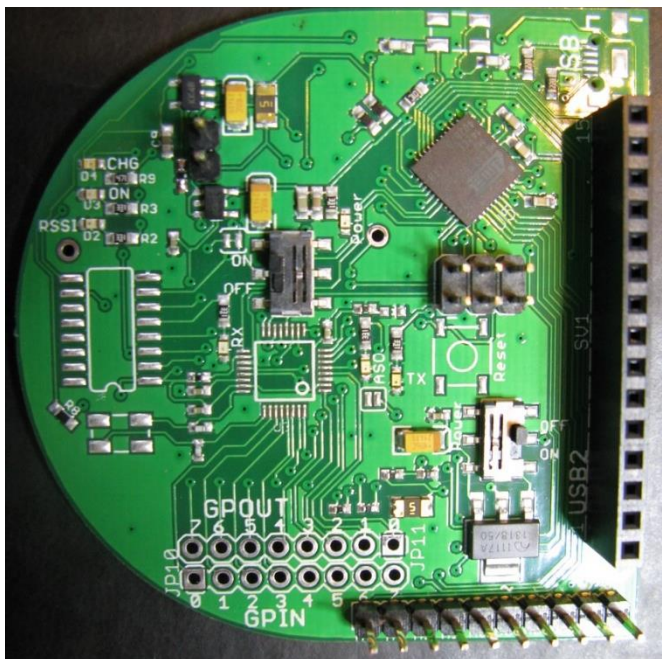
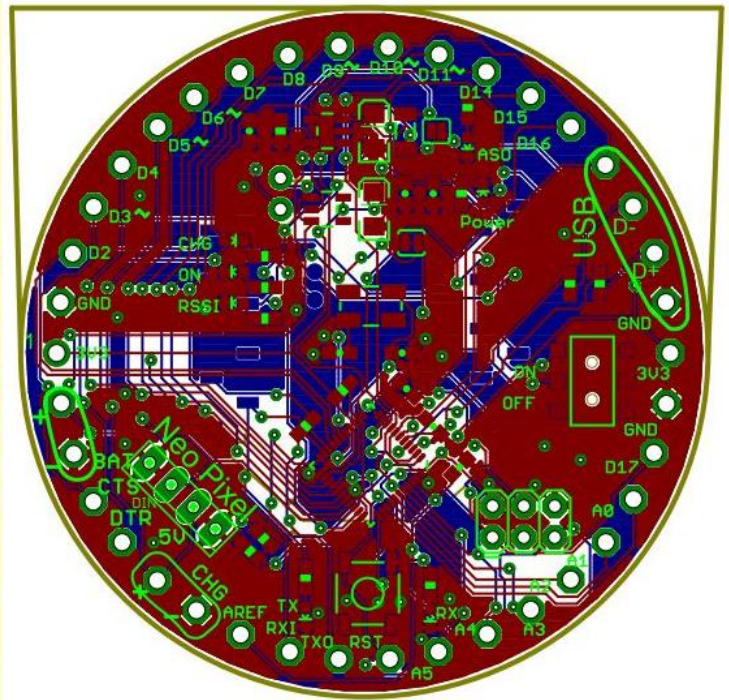
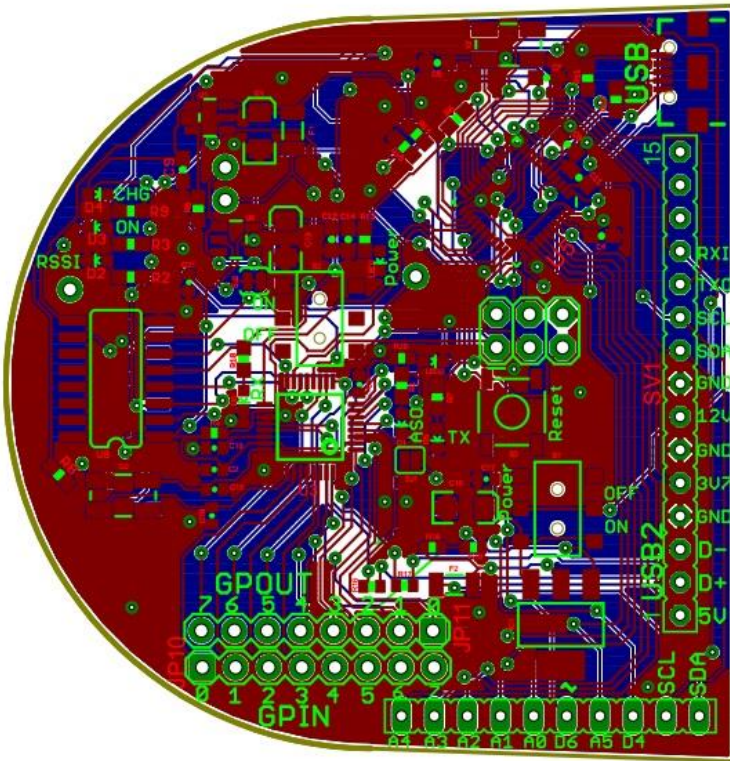
I worked on the project called **“Bomb Detecting robot”** and Published a research Paper at **“International Journal of Intelligent Systems and Applications”** It is a **wireless operating robot** which can sense **Smoke, LPG gas, Temperature, Humidity and Light**. Robot can **move on stairs** and can carry up to **5kg Wight**. And can be operated through **Android application**



My professional Projects

1. Circuit Designing and PCB board layout based on Arduino Fio v3 with RS485 USB shield (Project from an Australian Company)

- ◆ Design a custom Arduino **Multi-layer PCB** in **Eagle PCB CAD tool**
- ◆ Designing new connector for New XBee radio module.
- ◆ Interfaced RS485, USB host shield Neo pixel

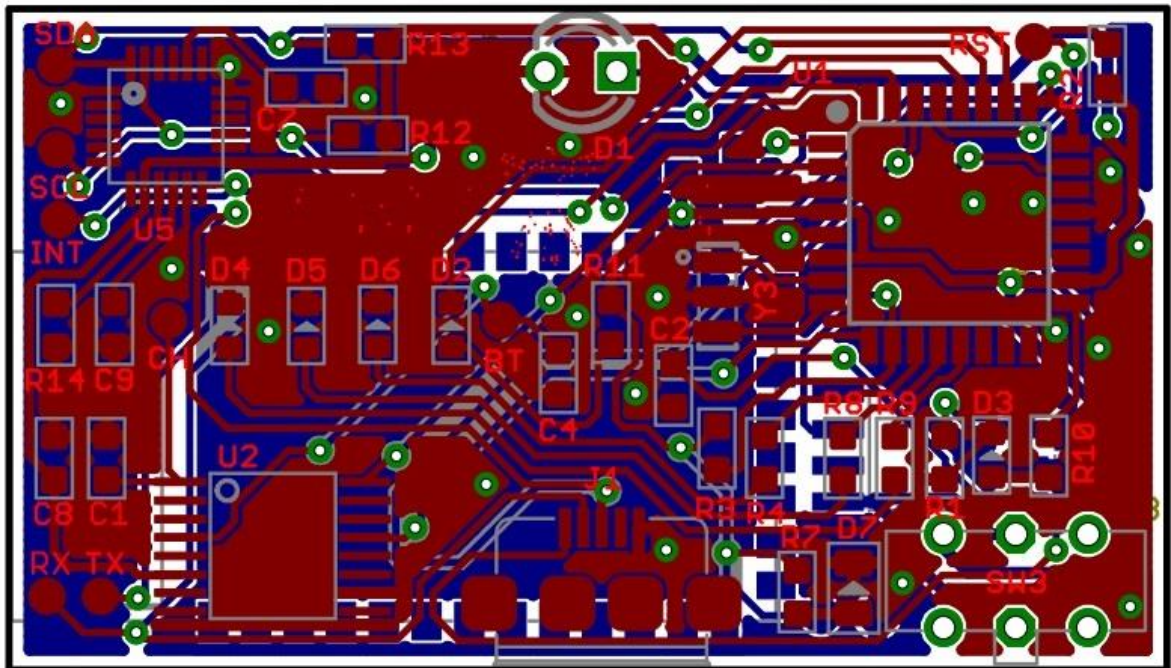


PCB BOARD AFTER FABRICATION

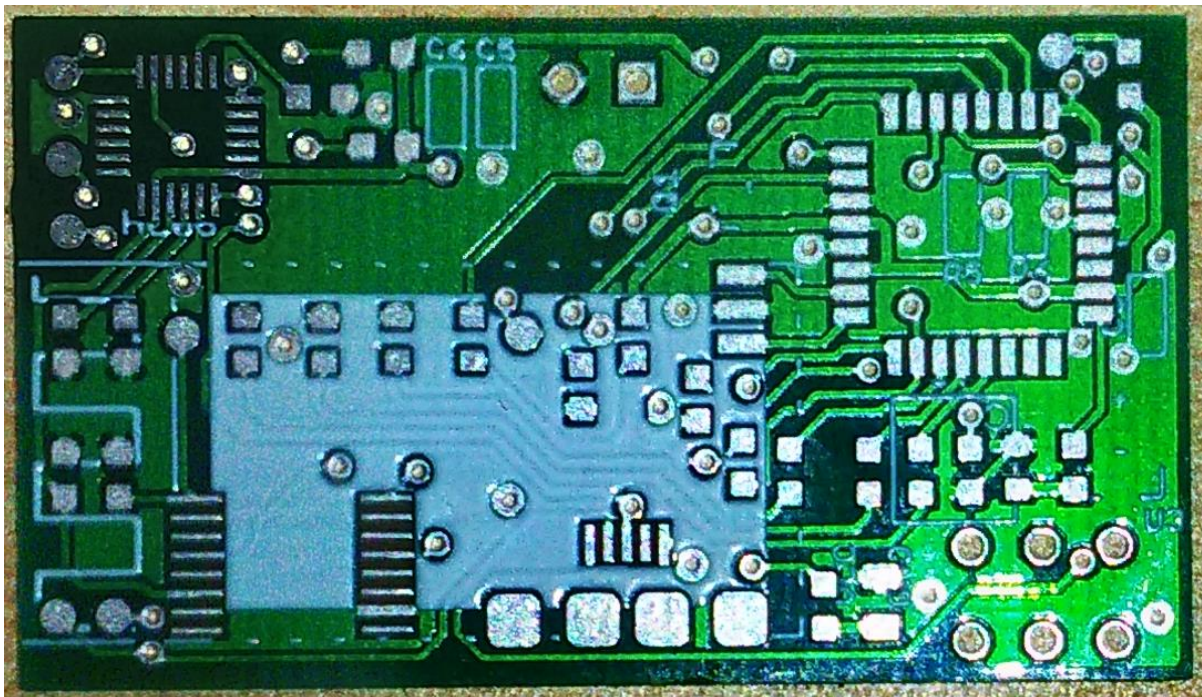
2. Smart Band with 9 axis Motion controller

(Project at Intrxn Technolabs Pvt. Ltd. Bangalore)

- Designed Smart gesture Band to control home appliances
- Embedded With Accelerometer, gyroscope, magnetometer, Bluetooth 4.0
- Quick Charge Controller, Capacitive Touch buttons, and several status LEDs



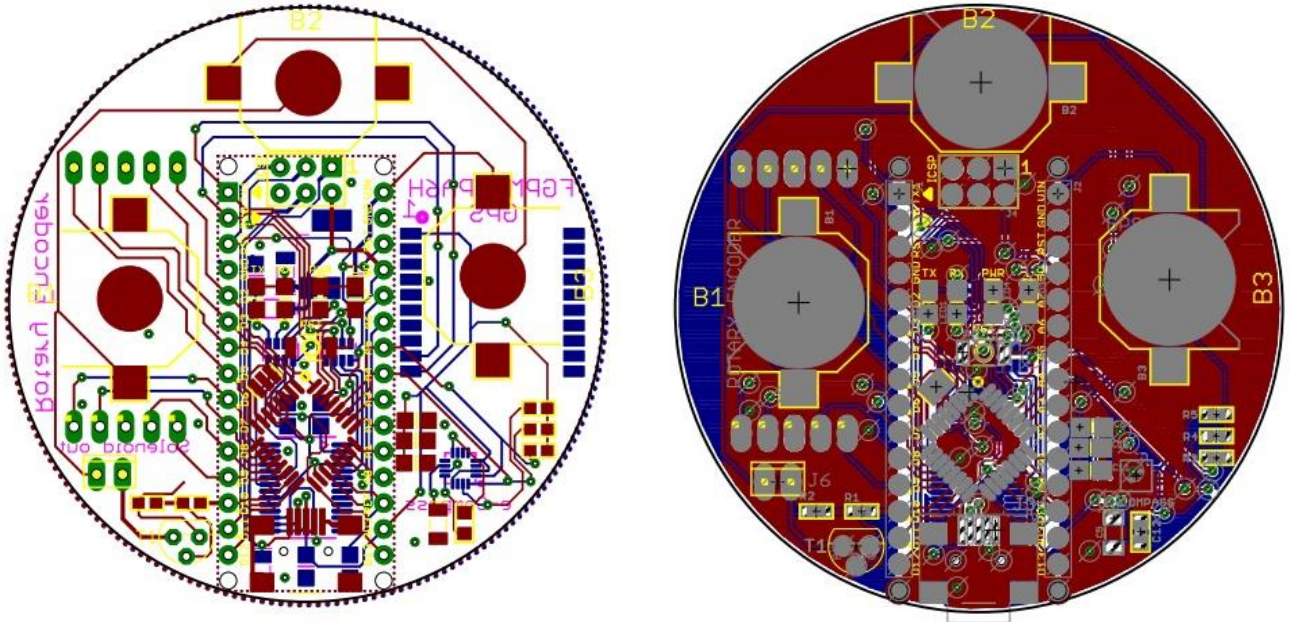
* IMAGE IS 6 TIMES BIGGER THEN ORIGINAL DIMENSON



3. Custom Circuit Design and PCB layout

(Project from an U.S Client)

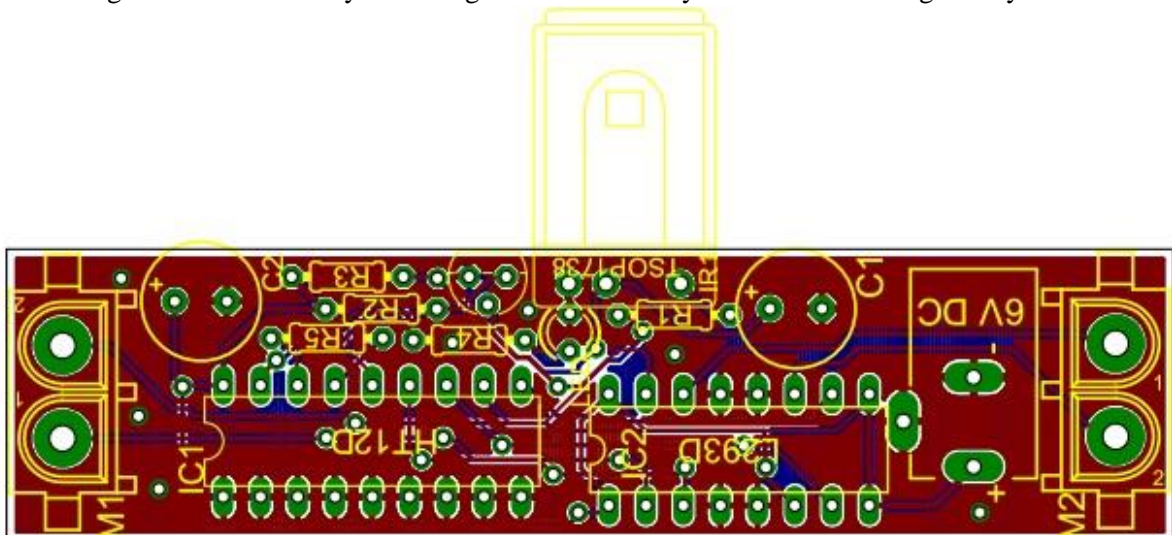
- ◆ Interfacing **GPS module, 3-axis accelerometer and rotatory encoder** with Microcontroller
- ◆ Circuit Designing for **USB interfacing of microcontroller** with PC
- ◆ Designed PCB layout in Eagle PCB CAD



4. Circuit and its PCB layout designing with low power consumption and low component costs.

(Project from an U.K Client)

- ◆ Designed **IR remote control circuit** to control the movement of Two DC motors
- ◆ Designed Circuit PCB layout in Eagle PCB in the very **small Dimension** given by client

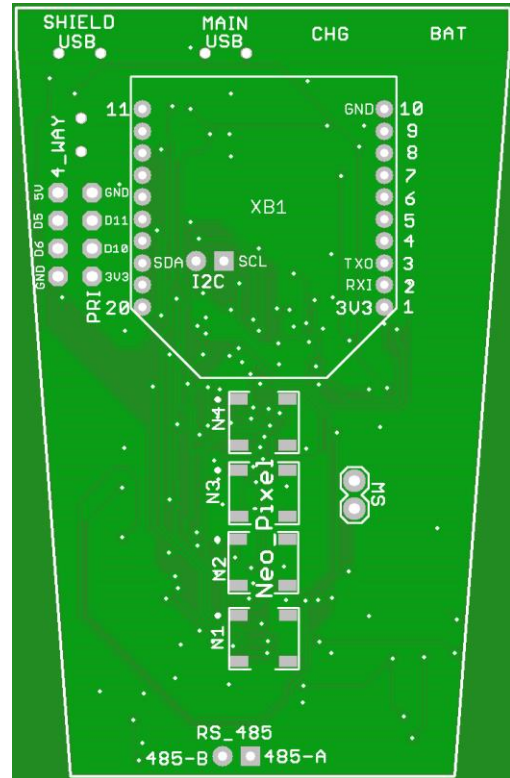
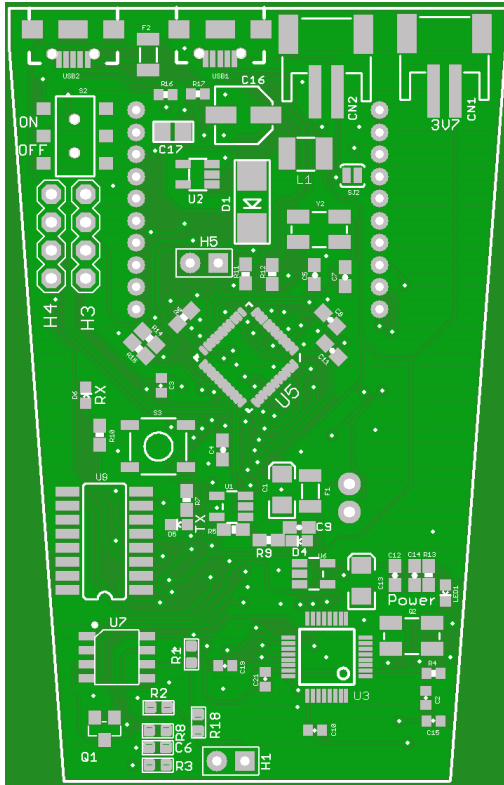


5. Schematic and PCB layout designing in Altium Designer

(Project from an Australian Company)

◆ Design a **Multi-layer PCB** in **Altium Designer** tool.

◆ Developed **Schematic Symbol & Layout Footprint CAD Library** for various ICs



- Apart from these projects I had done lots of more projects as a freelancer from multinational clients

Thank You!