**Objective:**

To work in a position where my skills in embedded applications are utilized to the fullest extent.

**Resume Summary:**

* Versatile R&D professional with **3** years of experience in development of microcontroller -based products and solutions. Specialized skills in hardware design, PCB designing, CAN, I2C, SPI, UART, RS232, PIC, 8051, RF.
* Professional Diploma in Embedded System Design from **ICIT University of Pune (Electronics Department),** Pune.
* Certificate course in Embedded system Design from College of Engineering Pune.(COEP ,PUNE).

**Technical Skills:**

* **Compilers** :Keil, Code Warrior, MPLAB.
* **Programming Languages:**Embedded C & Assembly Languages
* **Microprocessors / Microcontrollers:**
  1. **ARM** : LPC2148
  2. **8051**:89C51/52/S51/S52
  3. **PIC**: PIC16F877A,PIC18F458;
* **PROTOCOLS**: CAN,LIN, I2C, UART, RS232,SPI
* **PCB Designing**: Orcad,DIPTRACE(Schematic Capture & PCB layout)
* Proficient in Electronics circuit design and testing.
* Rich Experience in Product Development and testing.
* Good in equipment handling for testing.
* Proficient in testing of Analog, Digital Circuits and Power Circuits.
* Sound Knowledge of Digital and Analog circuit designing.

**WORK EXPERIENCE:**

1)Working as a Embedded Development Engineer at GetMy Solution, Baner, Pune since July 2015 to July 2017 .

**Experience summary:**

**Project**:

* Project on Renewable Energy resource project like Emergency lamp, Charging Lamp, Study Lamp
* Development of Electric Cycle with Chargeable energy resource(Lead acid & Lithium Battery)
* Development of Power Box Based on Solar charging.
* Development of Street Light with AC & DC version.

2)Working as Embedded Design Engineer at SN System Pvt Ltd,Swargate ,Pune since June 2017 to till date.

Role and Responsibilities:

* Layout design using PADS software (both Fresh and part jobs)
* Capturing schematics using PADS or Orcad and preparing layouts for multi-layer PCB usingPADS or Orcad .
* Library Creation (New components).
* Documented entire PCB layout.
* Problem solving/trouble shooting related to the design Strong interaction with Schematic design team, Mechanical design team and PCB Fabricator for the projects.

**Project Summary:-**

**Project 1: Eco Friendly horn**

We have introduced the eco-friendly horn project in order to make an effort to reduce noise pollution to some extent.The basic principle of the eco-friendly horn is that it transmits a signal from one vehicle to another vehicle in form of radio frequency signals. RF signals causes no sort of disturbance to humans as humans can neither see nor hear RF signals. The RF signal is converted to a sound signal only at the receiver of other vehicles. Thus the horn signal is only heard by the drivers of the vehicles. The pedestrians who are far away from the trans-receiver of the signaling vehicle don’t hear the sound.

**Project 2: Wireless Adaptive Motor Speed Control**

**Project Description:**

* Two units’ transmitter and receiver.
* At the transmitter, user enters the desired RPM value with the help of keypad.
* On the basis of desired RPM CCP module of PIC controller generate the PWM pulses.
* These PWM pulses are applied to motor through driver IC ULN2803.
* Motor rotates with that desired RPM, and with the help of inbuilt encoder sine pulses are generated.
* Output of motor is taken as a feedback to Schmitt trigger. Schmitt trigger convert sine wave into square wave.
* The output of Schmitt trigger is applied to another CCP module of PIC. Using capture mode of CCP, square wave is capture by PIC for error calculation.
* ZIGBEE protocol is used to transfer data packets from transmitter to receiver
* Data Packet consists of Duty cycle + RPM value
* At the receiver side these data are displayed on PC.

**Education:**

* B.E. (Electronics & Telecommunication) from Vidyalankar Institute of Technology (Wadala,Mumbai) and secured First Class (61.93%).
* Professional diploma in Embedded System Design from **ICIT University of Pune (Electronics Department),** Pune.
* Certificate Course in Embedded System Design from College of Engineering Pune(COEP).
* H.S.C. from RLT College of Science Akola Secured First Class (64.17 %).
* S.S.C.from Hindu Dnyanpeeth of Convent Akola Secured Distinction (74.84%).
* Certificate Course in Embedded System Design From College of Engineering

**HIGHLIGHTS:-**

* Member of VIT (WADALA) **Magazine committee** in year 2010-11.
* Volunteer representative of Techfest Event held by **IIT BOMBAY** in 2010.
* Participated in Paper Presentation competition in “Mind Spark ‘10” held by COEP,Pune
* Organized Engineer’s day 2013and fresher party.
* Active Blood Donor in many Blood Donation campuses.
* Active participation in DRAMA held in our college and school.

**PERSONAL DATA**

* Father’s name : Mr. Machhindranath V Khairnar
* Date of Birth :11 May, 1990.
* Language Known : English, Hindi, Marathi.
* Interest : cooking, playing musical instrument.

I hereby certify that the information I have provided in this document is true to the best of my knowledge.

**Place: Pune Signature**

**Date:**  (Nitish Khairnar)