### CURRICULUMVITAE

Y. SRINIVASARAO Cell –9000709111 Email: vsrao19760@gmail.com

#### **SUMMARY:**

Experience in design, development of Digital, Analog, Power, Mixed signal, Sensor, RF, BLDC Motor driver circuitry. Hand-on experiences with all aspects of board level design cycles: Research, Hardware design, Schematic & PCB Layout, Hardware testing and troubleshooting. Self – motivated and good team player with strong multi-tasking skills.

#### **SKILLS AND ABILITIES:**

- Experience in hardware design (Digital and Analog Circuitry).
- Schematic and PCB layout design
- Board Bring-up & prototype testing, System/product level testing.
- ➢ Knowledge on EMI/EMC.
- Experience with serial interfaces RS232/422, I2C, SPI, CAN, UART, Ethernet.
- > Experience with Memories interfaces SRAMs, EEPROMs, Flash .
- > Experience with Peripherals interfaces ADC, DAC, LCD and RTC.
- Experience in Sensors IR, UV, Magnetic Sensor, Pressure, Temperature, Humidity.
- Experience in Wireless Device LoRA, XBEE, Wi-Fi, GSM (LTE), NBIOT, BLE.
- Experience on ECAD tools Cadence, Altium, Mentor graphics pads, kicad.
- Simulation tools LT Spice / TI TINA.
- > Knowledge on MCAD tools Autodesk Fusion 360.
- Knowledge on Operating Systems Windows.
- Experience in lab equipment Oscilloscope, Multi-meter, Logic Analyzer etc.
- > Excellent analytical, troubleshooting and time management skills.
- > Ability to communicate effectively with strong organization and problem-solving skills.

# **PROFESSIONAL EXPERIENCE (15 Years):**

## NeoAura Technologies (P) Ltd

Sr Hardware Design Engineer Nov 16th 2022 to Present

- Hardware design.
- Schematic and PCB layout design.
- Product Development, Planning and Execution.

## **QUANTAED SOLUTIONS LLP**

Hardware Lead Architect September 2019 to Nov 15th 2022

- Taking the technical lead on EE design activities to support product development and improvements.
- Step in the role of technical HW project lead in our product or improvement projects.
- Collaborating with cross-functional teams to deliver technical solutions for the business.
- Create and ensure HW architecture is conform with agreed customer and internal requirements.
- Functional guide Hardware engineers and architects to a modular platform approach with focus to cost effective solutions.
- Coordinates With software, mechanical, and mobile app departments.

## **NSILICA SOLUTIONS (P) LTD**

Sr Hardware Design Engineer May 2018 to Aug 2019

- Hardware Design DMX, Dali, CCMS, Analog (0-10V) & PWM LED Dimmer.
- Schematic &PCB layout design.
- Hardware Design AC/DC converter.
- Product Development, Planning and Execution.
- Ability to work well in a group and coordinate development efforts with electrical, mechanical, and software engineers.

## Miqasa Home Automation (P) Ltd

Sr Hardware Design Engineer, Nov 2015 to Apr 2018.

- Hardware Design Power supply AC /DC, Triac Dimming Control, Energy metering, BLDC driver, Control board (STM32xx, PIC18Fxx, XBEE), Audio, capacitive touch circuitry.
- Schematic and PCB layout design.
- Coordination with Software, Mobile app development team.
- Support to Production and Installation, servicing Deportments.

# Zen Technologies Ltd

Sr, R&D Engineer (electronics), 11th Jan2012 to Oct2015

- Hardware Design Digital & Analog Circuitry.
- Schematic and PCB layout design and Board bring-up.
- Prototype unit integration & Testing.
- Develop and implement strategies to improve products for better yield and reliability.

## **Project2: Sim-Fire (Training Simulator)**

**Description:** The Sim- Fire Unit is useful for Training simulator for the Indian Army. The Unit is based on GPS, RF, Laser Projector, Laser Sensor, Light Reflector, Laptop or Excon Unit. All the modules fixed to War Tank (T-72 & T-90). The laser projector sends the Laser light With Scanning to the Opposite Tank, when the Scanning light is reflecting to Laser Projector sense the laser light and Stop the Scanning, fix the target and distance of Opposite tank. According to the opposite tank distance Select the Ammunition and Send The kill signal and hit the tank. The opposite tank is giving the warring alarm that tank Circuit and Engine off. This killed event is stored in both tanks and Base Station According to the GPS time and location of tank.

Client: Indian ArmyHardware: PIC32Fxx, DSPIC30xx, Zig Bee.Tools: Radio Communication test equipment, Logic analyzer, CRO.Team size: 7.Role: Team Leader.

## Project1: Zen Combat Training Simulator System (ZEN CTSS)

**Description:** ZEN CTSS is a live simulator to train a soldier to utilize the skills acquired during training in field craft, battle drills and live fire practice while carrying out operational exercises. Collective training is subjective and in absence of an accurate monitoring system, leads the commander to arrive at conclusions that may be far from reality. The simulator assimilates lasers fired from different weapon systems and effectively records the result of the engagement. It enables use of personal weapons, battalion support weapons and all major combat firing weapon systems in actual

/simulated form. As an optional feature, it simulates artillery fire and minefield in designated regions. Zen Tac uses harness sets for man and machine and integrates GPS, Control Unit and the Communication Module. Alarm units are activated on being hit and the nature of alarm varies depending on the severity of injury/damage the hit would cause The tactical simulator deactivates the harness set and records the damage. It also enables resetting. The initiative is always with commanders.

|           | : Indian Army  |
|-----------|--|
| Hardware  | : PIC32Fxx, PIC24Fxx, C1100, GPS,                          |
| Tools     | : Radio Communication test equipment, Logic analyzer, CRO. |
| Team size | : 12.  |
| Role      | : Hardware Design Engineer                                 |
|           |  |

# Analogic Controls (I) Ltd

Engineer-R&D, Apr 2009 to 10<sup>th</sup>Jan2012.

- Hardware Design and Testing of the Digital & Analog, Mixed Signal circuitry.
- Schematic Design.
- Provide Layout guidelines to PCB Layout Designer.
- Prototype unit integration & Testing.
- Coordinate with various vendors and contract manufacturers.
- Coordinate with Software, Mechanical and Quality departments.

## **Project 2: Time Interval Counter**

**Description:** Time Interval Counter (TIC) is a device used in T-90 war tanker and is playing the major role in measuring the Target distance. The target distance will be calculated by using two factors speed and time and converting into distance. By keeping the Aiming mark on the target by watching through lens Laser beam will be released. Immediately Reset and Start pulses will come as input to the counter then counter starts counting the free clocks generated from the clock generator until it gets Stop pulse echoed from the target. The time between start and stop pulses and the speed of laser beam will used for converting into the distance and it will be displayed on the segmented display.

Client: Society for Integrated circuit Technology and Applied ResearchHardware: XC3S50AN, AT89C51ED2, AD9696, INA133, 74HC123.Tools: Logic analyzer, CRO.Team size: 2.Role: Hardware Design Engineer

### **Project 1: Automatic Weather Stations Data Logger**

The AWS Data Logger for use in Remote Automatic Weather Stations. The system is very power-efficient and allows long functional autonomy on a limited DC source. Logging in local memory and transmission of data from remote stations can be completely scheduled with several protocols supported.

Client: IsroHardware: MSP430F5438, ADS1258, ST16C2552IJ, 45DB642D, SN6HVD31, MAX3232.Tools: Logic analyzer, CRO.Team size: 3.Role: Hardware Design Engineer

## **EDUCATIONAL QUALIFICATIONS:**

• Diploma in electronics and communications.

### **PERSONAL DETAILS:**

| Name          | : SRINIVASA RAO.Y  |
|---------------|--------------------|
| Father's Name | : Venkateswara Rao |