

## Siddharth Soni

Asst. Systems Engg. – Trainee (Innovation Labs, TCS - TVM)

sidsoni1995@gmail.com

8072768554, 8989892697 (WA)

OB-3, M.P.S.E.B. Colony, Rampur, Jabalpur, India

plu.us/sidson

linkedin.com/in/siddharth-soni-6b394628 in

Individual passionate about learning and contributing to the growth of an organization by practical implementation of skillset and hence improvising technical and social skills for career growth.

#### **EDUCATION**

**B. Tech. (Electronics And Communication)**Vellore Institute Of Technology, Vellore

2015 – 2019 8.03 CGPA

SSC (CBSE)

DAV Public School, Kota

2012 - 2014

79.4 %

O HSC (CBSE)

St. Aloysius Sen. Sec. School

2010 - 2012

9.40 CGPA

### **INTERNSHIPS/TRAINING**

### Tata Consultancy Services P. L. (01/20 - Present)

Development of smart shopping cart using RPi 3B+, touch display, HX711 weight sensor module, web-camera and basic computer vision to make checkout & payment possible by the customers themself and skip the hassle of queues in shopping marts. (Ongoing)

### Bert Labs Pvt. Ltd., Bengaluru (10/19 - 11/19)

Dev. & arch. planning of load balancer for OTA, report generation module & python automation, firmware improvement using multithreading and testing of company's IoT controllers.

#### Smart Joules Pvt. Ltd., New Delhi (01/19 – 06/19)

Development & arch. planning of testing application for MODBUS, implementation of Firmware-OTA update on STM32 ARM Cortex M4 MCU via Raspberry Pi 3B+, firmware development of analog converter module using STM32F446RE, testing automation of controllers, driver development for serial communication (I2C, SPI, UART, MODBUS) & sensors like PT100, Belimo CO2 sensor, NTC temp. sensor; SD card, LCD Interfacing, hands-on experience with Raspberry Pi (A+, 3B+), Arduino, ESP-8266. (Agile Workflow)

#### Invento Robotics, Bengaluru (06/18 – 07/18)

Designing and implementation of elbow-pivot motion, hand gestures and enhancing emotion representation by LED lighting for coupling with android for **MITRA robot**, with initial work on its battery monitoring system.

## **PROJECTS**

Implementing **Firmware - OTA** Update on STM32 MCU using Raspberry Pi MCU (02/19 – 04/19)

Development of procedure for updating the firmware of STM32 MCU by using STM's **bootloader** using Raspberry Pi 3B+ on Linux.

MODBUS Tester Software and Testing Automation (5/19 – 6/19)

Python based Linux Terminal Application for bug resolution and **driver testing** of deployed devices that work on MODBUS

Protocol via reverse SSH over the internet which **reduced bug resolution time drastically**. Also, implemented automation in testing of devices coming in from production and **reducing the ready-for-deployment time by over 4 times**.

# **IoT based Home Automation System with Voice** Recognition (07/17 – 11/17)

Platform for controlling appliances using voice commands (Bluetooth) and over internet (Blynk) from a mobile, the novelty of the idea being partial power cut-off and always on fridge.

# Hand motion and emotion display for MITRA Robot (01/16 - 5/16)

Worked on integration of emotion displaying LED strip to android and elbow movement of the robot with initial works on hand gestures of the robot.

# Automatic Floor Cleaner using Obstacle Detection Bot (1/16 - 5/16)

Obstacle detection bot with modifications like brush attached to a motor at the bottom and a bin beside it so as to collect trash and dust while moving around the house and cleaning it automatically.

# Night Vision Camera with Light Sensitivity (07/15 – 11/15)

Night Vision camera with light sensitivity for saving excessive battery drain, for installation in remote areas for defence and guarding purposes. With 100 IR LEDs, high coverage area and automatically adjusting brightness with external light.

#### **SKILLSET**

**Python**, Blynk **IoT**, Linux, Embedded C, Raspberry Pi, Git, AWS, Computer Networking, Driver Development, STM32 CUBE-MX.

### **ACHIEVEMENTS**

Served as core committee member for ISA-VIT, managed SPARK'17 Tech Symposium, sold the maximum number of event registrations for technical festival graVITas.

Secured 3rd Position in State Level Badminton Championship for M.P. and participated in it twice and was among top  $10\,$  players in my university.

Qualified JEE Advanced, JEE Mains and secured first category rank in VITEEE.

Secured 3rd position in an electronics technical event 'Impedance' in gravitas.

Completed five years out of six of bachelor's degree of classical Tabla.

### **CERTIFICATES**

Machine Learning A-Z™: Hands-On Python & R In Data Science (Udemy, Ongoing), Algo. And DS in Python (Udemy), Python for everybody (Coursera), Mobile Robotics (open2study).