

**EDUCATION****TECHNOCRATS INSTITUTE OF TECHNOLOGY AND SCIENCE****BHOPAL, India****2012 – 2016**

- **Bachelor of Engineering – Electronics and Communication Engineering.**

**TECHNICAL SKILLS**

- **Tools:** Shell Scripting, gdb, Valgrind, CCS.
- **Platform:** TI C66x DSP
- **Protocols:** SPI, I2C, UART, IPC, TCP, UDP
- **Programming Languages:** C, Python(basic)
- **Other skills:** Multi-threading, Socket Programming, Data Structures and Algorithms, Linux OS, SVN, Vim editor.
- **Interpersonal Skills:** Teamwork, Problem solving, Innovative, Communication.

**EXPERIENCE****Technical Staff- Software team****Saankhya Labs, Bangalore, India****Sept 2017 – Present****Tactical Software Defined Radio (SDR)**

- Developed the e-TDMA based MAC layer for Software Defined Radio supporting up to 32 users in a network with self-healing properties.
- Implemented Five phase reservation protocol (FPRP) for RACH, Bandwidth Reservation scheme (based on FPRP), and developed an algorithm for Data collision resolution. (check out the commas)
- Involved in the design and implementation of Data-plane functions in the MAC for a robust range of payloads, and helped in designing of data packet Fragmentation and Reassembly.
- Helped in the design and implementation of innovative ways of broadcasting and multicasting the voice packets through multiple hops.
- Part of the integration and bring-up team – responsible for integrating the MAC layer with the L3 Routing layer, and PHY layer supporting multiple waveforms like CPFSK and OFDM.
- Developed the framework for testing the MAC functionality and also responsible for resolving MAC layer bugs arising in the field testing.
- Integrated the ubloxGPS driver with C66x based DSP for timing synchronization.

**Intelligent Home Automation****CDAC, Hyderabad, India****June 2017 - Aug 2017**

- Home, Automation for monitoring the power consumption of household devices, and uploading the data to the MediaTek Cloud Sandbox.
- Given the facility to control the home appliances, and also get the status of electrical appliances so as the user can save electrical Power through the android application. The device is capable to set the routine itself using a smart algorithm.
- This system has been developed on Linkit ONE board having WiFi connectivity using Arduino IDE.

**BLACK LINE FOLLOWER ROBOT****TIT and Science****NOV 2015 - MAR 2016**

- The black line follower robot by using the ATmega8 microcontroller, two IR sensors, two DC motors, and L239D.

**CERTIFICATION**

- Post-Graduation Diploma in Embedded System Design (PG - DESD) from Center for Development of Advanced Computing (CDAC).

**CONTESTS & WORKSHOPS**

- Zonal Winner in the workshop of Robotics organized by IIT DELHI. Participated in RoboTryst organized by Robo Sapiens Technologies Pvt. Ltd at IIT DELHI.
- Participated in Chip Focus, 3 days workshop.