

## PROFESSIONAL SUMMARY

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- 3 months of experience in **Embedded Software Development**
- Knowledge of **UART, SPI, I2C & MQTT** protocols.
- Good Knowledge on **programming languages** like **C, C++, Verilog**.
- Good understanding of **Digital Electronics, Embedded & VLSI**.

## PROFESSIONAL EXPERIENCE

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Company: **PerfectVIPs**

Embedded Engineer

June 2019 – Present

### PROJECT DETAIL

Project: **Transferring Data from Android Application to An e-paper Display**

3 Months

**Description:** Data (Image and String) are transmitted using **android application** to **Raspberry Pi** over **MQTT** (Message queuing telemetry transport) protocol. Transmission was done remotely, Android application works as a **publisher** and **Raspberry Pi** works as a **subscriber**. Collected **data** are displayed on **e-paper display**.

**Roles & Responsibilities:**

- Involved in **Subscriber code development** and implementation

## ACADEMIC PROJECTS

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Project: **Bidirectional Visitors Counter**

3 Months

**Description:** This is done using basic concepts of **digital electronics**. **Up-down counter** is used to count appropriate number according to detection of entry and exit of the person with the help of **IR sensor module**. Number is displayed on **7-segment display**.

**Roles & Responsibilities:**

- Involved in **Circuit designing, implementation** and testing

Project: **Path Follower & Obstacle Avoider Robot**

3 Months

**Description:** The project involves interfacing of **ultrasonic sensor, color sensor, servo motor** with the **Arduino**. This **robot** follows the specific color and obstacles are avoided by using **ultrasonic sensor** and **servo motor**.

**Roles & Responsibilities:**

- Involved in **Code development** and implementation

Project: **Design & Implementation of GUI & Hardware Interface for LHCD(Lower Hybrid Current Drive) Data Acquisition of 64 Channels**

3 Months

**Description:** For confinement of **plasma, power** is directed from different **64 channels**. **Raspberry pi** is used as an intermediate device. **Data** is read by network of **ADCs** and **decoder** then mapped according to ideal characteristics to obtain **power** and **phase** of the **signal**. Collected data is displayed on **GUI**, stored in an **excel file** and transferred to another computer for **distant monitoring**.

**Roles & Responsibilities:**

- Involved in **Hardware designing, code development** and implementation

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#### EXTRA CURRICULAR ACTIVITIES

- Event coordinator in **felicific (tech-fest) 2016 - 2017** organized by **D.D. University**.
- Attended workshop on sixth sense robotics at **IIT-Bombay**.
- Participated in **e-yantra (IIT-Bombay)** competition.
- Certified as a first runner-up in technical event at **techfest** in **DigitalElectronics**.
- Attended course of **java language**.

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#### TECHNICAL SKILLS

**Protocol knowledge:**      **UART, SPI, I2C, MQTT**

**Programming Languages:** **C,C++,Verilog,Assembly**

**Tools:**                      Basics of **Keil, Matlab, Scilab, Quartus, Multisim, Proteus, Arduino IDE**

**Operating System:**      **Windows, Linux**

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#### EDUCATION

B.Tech in Electronics and Communication Engineering from **Dharmsinh Desai University**, Nadiad in 2018 with 8.06 CPI