

## OBJECTIVE

Graduate Design Intern at Hillsboro, Austin, or Santa Clara

## EDUCATION

- **Portland State University** Portland, OR  
*M.Sc Electrical and Computer Engineering, - / 4.0* Fall 2021 – Spring 2023
  - **Relevant Courses:**
    - \* **ECE 581:** ASIC Modelling and Synthesis (Dr. Xaiyou Song) - Fall 2021
    - \* **ECE 585:** Microprocessor System Design (Mark Faust) - Fall 2021
    - \* **(tentative) ECE 586 :** Computer Architecture (Mark Faust) - Winter 2022
    - \* **(tentative) ECE 587:** Advanced CompArch I (Yuchen Huang) - Spring 2022
    - \* **(tentative) ECE 588:** Advanced CompArch II (Yuchen Huang) - Fall 2022
- **College of Engineering, Pune** Pune, Maharashtra, India  
*B.Tech Electronics and Telecommunication Engineering, 3.2 / 4.0 (7.99/10)* May 2015 – June 2019

## EXPERIENCE

- **Tejas Networks** Mumbai, Maharashtra, India  
*Research and Development Engineer* August 2019 - August 2021
  - **Networking Technologies:** Working with DHCP, VLAN tagged Traffic management, VPNs, Downstream Ingress Bandwidth, HQOS queuing, Traffic Shaping Profiles, etc.
  - **C/C++:** The software used for configuring switching capabilities of a network card is largely based in C for device drivers and C++ for higher level UI.
  - **Feature Development:** Implemented Zero Touch In-Band Management feature request by Tejas Network's client with inputs from the Sales team and feedback from QA team.
  - **Python:** Extensive scripting to trivialize monotonous commands with flexibility to adapt to situations.
  - **Training:** Trained new recruits to the team and enabled them to contribute meaningfully.
  - **SQL:** Switching Configuration stored on the network cards is in a database, which needs to be created, updated, or re-played onto the hardware as required.
- **DOT Sys Technologies** Mumbai, Maharashtra, India  
*Design Intern* May 2018 - August 2018
  - **Transistor Theory:** Implemented Pulse Width Modulation to control voltage and current levels to make a programmable power supply within the constraints of Transistor hardware.
  - **Power Electronics:** Used loose capacitors, inductions and Transformers to convert main lines supply to transistor switching compatible levels.
  - **Arduino:** Made a Programmable Battery Charger with UI implemented on Arduino + Transistor Theory and Power Electronics to manage the charging functionality.
- **Eduvance** Mumabai, Maharashtra, India  
*Intern (B.Tech. Final Year Project - Smart Paper Tracking System)* May 2017 - January 2018
  - **IoT:** Used RPi to collect data from devices via Bluetooth and IBM cloud services to implement data storage, sync, and decision making on cloud
  - **Bluetooth:** Used Cypress Semiconductors PSOC4-BLE boards as portable markers to be attached to files to track them and provide information to RPi for syncing.

## PROJECTS

- **hamming\_code:** Asynchronous Hamming Encoder and Decoder in System Verilog.
- **fifo:** Parameterized multi-port fifo for simultaneous reads and writes.
- **i2c:** I2C master and slave implemented in Verilog, currently re-writing code in to System Verilog.
- **ffind:** Small wrapper for find command in linux to make it accept grep-like arguments. Written in golang and rust.
- **Music-Player-GO:** Feature Contributions to open source Music Player app. Written in kotlin.

## PERSONAL PUBLICATIONS

- **Modified MD5 Algorithm for Low-End IoT Edge Devices.:** Viraj Khatri, Dr. Vanita Agarwal. ICCCNT2019