

OBJECTIVE

Graduate Design Verification Intern at Hillsboro, Austin, or Santa Clara

EDUCATION

- **Portland State University** Portland, OR
M.Sc Electrical and Computer Engineering, 4.0 / 4.0 Fall 2021 – Spring 2023
 - **Relevant Courses:** Microprocessor System Design, Computer Architecture, Advanced CompArch I, Advanced CompArch II, Intro to Hardware Security, Pre-Silicon Validation, ASIC Modelling and Synthesis
- **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.
 - **Linux:** Network switching cards employ a modified linux kernel. Extremely familiarized with linux and its utilities. All development done in vim text editor and bash terminal environment.
 - **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.
- **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

- **dram-controller:** A bank parallel DDR4 memory controller with access scheduling written 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