

## 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* *September 2021 – March 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, 7.99 / 10 (3.2 / 4.0)* *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++:** Debugging existing code, and Designing new code with the same standards as existing code. The software running on a network card is 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.
  - **Feature Development:** Implemented Zero Touch In-Band Management feature request by Tejas Network's client with specification 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:** Used Pulse Width Modulation to control power levels and make a programmable power supply.
  - **Power Electronics:** Used capacitors, inductions and transformers to convert main lines supply to usable levels.
  - **Arduino:** Programmable Power Supply controls via numpad using PWM to change voltage and current levels.
- **Eduvance** Mumbai, 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 Watson cloud services to implement data storage, sync, and decision making on cloud data.
  - **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

- **riscv-simulator:** A simulator for rv32im isa. Written in C.
- **dram-controller:** A bank parallel DDR4 memory controller with access scheduling. Written in System Verilog.
- **fifo:** A parameterized multi-port fifo for simultaneous reads and writes. Written in SystemVerilog.
- **ffind:** A wrapper for find command in linux to make it accept grep-like arguments. Written in golang, rust, and C.
- **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