virajkhatri@gmail.com

♥ vtkhatri +1 469 922 4573

OBJECTIVE

Graduate Architecture Intern at Hillsboro 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**: Continuously 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 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 in collaboration with QA team.
- Python: Extensive scripting to trivialize monotonous commands with flexibility to adapt to situations.
- Training: Trained new recruits to the team and enable them to contribute meaningfully.
- **SQL**: Configuration stored on the network cards is in a database, needs to be created , updated, or re-played onto the hardware are 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 within constrains 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 actual charging.

Eduvance

Mumabai, Maharashtra, India May 2017 - January 2020

Intern (B.Tech. project - Smart Paper Tracking System)

- o **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 fifo with no handshaking protocols for outgoing communication.
- i2c: 12C master and slave implemented in Verilog, currently re-writing code in to System Verilog.
- ffind: Small wrapper for find command in linux to make find accept grep-like arguments.
- Music-Player-GO: Feature Contributions to open source Music Player app.

Personal publications

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