

Taha Arif

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tahalistens.github.io

EDUCATION

North Carolina Central University, Durham NC

Jazz Studies, Drumset, **August 2020 - Jan 2022**

North Carolina State University, Raleigh NC

Electrical Engineering, Renewable Electric Energy Systems, **June 2013 - May 2017**, GPA: 3.49/4.00

SKILLS

Technology: **Wordpress**, Full Stack WebDev (NodeJS, express, React), AT Protocol, php, python, javascript, SPA

Language: Music, **Urdu/Hindi**, Seraiki, **Spanish**, English. Currently Studying Arabic, Mandarin, and French.

Awards: 2017 Sustainability Make-a-thon winner, NAE Grand Challenge Scholar, IEEE PEES Plus Scholar

ACHIEVEMENTS AND INTERESTS

- Full Stack WebDev (NodeJS, express, React), Wordpress, AT Protocol, php, python, javascript
- Passions involve music, movement, and meditation, and service.
- Designed and installed a 5KVA photovoltaic power system in Gilgit-Baltistan, Pakistan after NCSU Graduation.

RELEVANT EXPERIENCE

Goodroads.io

Hardware Engineer

July 2018- January 2019

- Designed, developed, **embedded linux system** to capture road data running on **Python and Pandas**

PowerSecure

Engineer DI Products

November 2017- May 2018

- **Trained in CPR.**
- Program microgrid operating modes into PLCs, RTACs inverters, for distributed Energy Devices
- Configure communication of our devices through DNP, Modbus TCP, and serial protocols.
- Produce preliminary drawings in AutoCAD Electrical.

Windlift, LLC, Raleigh NC

Electrical Systems Engineer

January 2016- July 2016

- Led PMSM motor control testing and packaging. Tuned and fixed inverter control boards.
- Worked with AC/DC converters and three phase inverters in order to drive selected motors, loaded by battery bank.

Freedm Systems, Raleigh NC

Undergraduate Research Scholar

August 2015- May 2016

- Assembled a Modular Energy Generator to be implemented in the Dominican Republic's distribution system.
- Evaluated capabilities of Toshiba batteries using Arbin Battery Analyzer.
- Ran capacity, thermal, and load tests on lithium Ion batteries
- Worked on modular energy products promoting micro-grid implementation in the Dominican Republic

International Future Energy Challenge, Sheffield UK

Award winner

January 2015- July 2015

- 5 man team working on a Bidirectional Autonomous Inverter for operation between grid, solar, and batteries. Capable of Autonomous Control.
- Chief Hardware Technician- Responsible for planar transformer design, PCB layout, and assembled system.
- Won award for most efficient system, achieved 94% efficiency using GaN Devices.
- Developed proof of concept for a lightweight bike share program that uses existing bikes and bike racks.

LIFE EXPERIENCE

Wage/Tipped Labor

Server, Bike/Car Delivery, Busboy

- Outback Steakhouse, Player's Retreat (restaurant), Jimmy John's, Nancy's Pizzeria, Cracker Barrel, Drummer

Lyft Driver

- My favorite service job thus far!
- Self employed whilst learning how to play music, how to listen, and how to support a conversation.