

# NURUDEEN AGBONOGA

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## SKILLS

**Software:** Microsoft Office (Word, Excel, PowerPoint), MATLAB, Simulink, Multisim, PSPICE, LabView, Blender, Verilog, ANSYS HFSS (High Frequency Structure Simulator), Solid Edge, Eagle

**Programming:** C, Python, PHP, CSS, HTML

## EDUCATION

### UNIVERSITY OF TEXAS, DALLAS

Dallas, TX

*Master of Science in Computer Engineering*

**GPA:** -

**EXP GRAD:** May 2023

### UNIVERSITY OF TEXAS, ARLINGTON

Arlington, TX

*Bachelor of Science in Electrical Engineering*

**GPA:** 3.76/4.00

**GRAD:** Dec 2019

## EXPERIENCE

### ONCOR ELECTRIC DELIVERY

Dallas, TX

*Systems Engineer*

*Nov 20 – Jun 21*

- Co-ordinated with data team to provide real time power grid asset monitoring in a comprehensive graphical format
- Incorporated personnel and public safety procedures into design and operation according to the North American Electric Reliability Corporations Critical Infrastructure Protection's protocols

### THE SHOULDERS OF GIANTS

Dallas, TX

*Technical Mentor/ Research Assistant*

*Feb 20 – Present*

- Volunteered as a research assistant on multiple engineering projects for STEM outreach. Tasks involved PCB design, project documentation, creating animated tutorials and presenting and assembling projects with school children 3 through 12
- Served as a technical mentor for high school students working on personal projects as well as structured projects offered by organization in various fields of engineering including biomedical and electrical

### BEUMER GROUP

Arlington, TX

*CAD-PLM Intern*

*Sep 19 – Dec 19*

- Worked with the product design team in a Project Lifecycle Management Project
- Effectively transitioned existing designs and drawings from AutoCAD to Solid Edge

### RFID AND AUTO IDENTIFICATION LABS

Arlington, TX

*Lab Manager*

*Aug 18 – May 19*

- Supervised a team of 10 research assistants and progress of 4 research projects; RFID in sleep monitoring, firearm tracking, medication tracking and an RFID Integrated Smart Chair
- Designed and conducted experiments involving antenna simulations using ANSYS HFSS, antenna fabrication and assessment of RFID systems

## PROJECTS

### <\$10 Programmable Pulse Generator

*Dec 19*

- Designed a low cost system capable of generating various waveforms as requested by a user with automatic level control and network gain calculation. The project was realized with the TM4C123GH6PMI microcontroller, a Digital to Analog Converter (DAC), Operational Amplifiers and a switched capacitor voltage converter.

### Athletic Performance Monitor (Senior Design Project)

*Dec 19*

- Worked in a team to create a system that utilized heart rate monitoring and data from inertial measurement units (IMU's) to determine fatigue in basketball players. The project was realized with the MSP432 microcontroller, BMI160 IMU, MAX30102 pulse oximeter, Bluetooth low energy (BLE) module, and an app

## PUBLICATIONS

- Agbonoga N, Lalwani B, Jones E.C. Development of Affordable Smart Ingestible Pills for Safe Self Medication, International Supply Chain Technology Journal, 2019.