

NURUDEEN AGBONOGA

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SKILLS

Programming: C, Python, PHP, CSS, HTML

Other: MATLAB, Simulink, Multisim, PSPICE, LabView, Verilog, ANSYS HFSS (High Frequency Structure Simulator), Solid Edge, Eagle, Cadence Virtuoso, HSPICE

EDUCATION

UNIVERSITY OF TEXAS, DALLAS

Dallas, TX

Master of Science in Computer Engineering

GPA: 3.78/4.00

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

GOOGLE

San Francisco, CA

Software Engineering Intern

May 22 – Aug 22

- Developed, tested, and maintained software solutions for fitness tracking on the Fitbit devices which have tens of millions of active users worldwide
- Implemented software to automatically detect if a Fitbit fitness tracker is worn on a users' hip in a clip-on case or worn on their wrist by leveraging the device sensors and machine learning algorithms
- Built pipeline for data collection and iterating and optimizing machine learning classifiers to achieve 87% sensitivity and 89% specificity
- Integrated hip detection feature to the Fitbit tracker using techniques and parameters derived from the research phase of the project, with 100% code coverage from unit testing

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 for grid operators
- 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 – Sep 21

- Volunteered as a research assistant on multiple engineering projects for STEM outreach. Tasks involved PCB design, project documentation, 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

PROJECTS

Auto-Carwash State Machine ASIC design

Dec 21

- Created a state machine ASIC from the logic design and Verilog code to laying out and testing a library of standard cells in cadence virtuoso to placement and routing of final design. The final ASIC was made of 3000+ cells and it described the operation of an automatic car wash system

<\$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.

PUBLICATIONS

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