tamaraupreye benni

📧 tamaraupreyebenni@gmail.com   📞 (267) 461-5494   🌐 tambenni.io

summary

A motivated and innovative engineer interested in machine learning, programming, processor design, and mathematical analysis. Passionate about learning and using my knowledge, eye for quality and functional design, and attention to detail to solve challenging, multi-faceted, fundamental problems

experience

PSQ Intern @ Apple
May – Aug 2019...June – Aug 2020 // Cupertino, CA
▸ Designed and built robotic fixtures using computer vision for automated device testing
▸ Worked on modernizing a python-based automation framework
▸ Developed and remotely executed robotic testing of devices using custom robotic fixtures
▸ Analyzed and triaged test results and bug reports

Software Development Intern @ ActivEdge Technologies
July – Aug 2018 // Lagos, Nigeria
▸ Worked in a team to develop utilities for SmartStream's Corona (a reconciliation system used by financial institutions to manage end-to-end transaction flow) using Java
▸ The utilities include File converters, Download managers, and Report generators
▸ Updated the logging functionality for the application to use ch.qos.logback, aggregating logs from the different utilities into a repository with a time and size-based rolling policy

projects

#BisonHacks 2020
▸ Worked in a team of 5 engineers to develop Konnect, a business analytics app that scrapes the internet to discover public sentiment about businesses in real time and also uses social media to promote businesses with the highest ratings weekly
▸ Used Flask Python framework to build the database for the application
▸ Built the sentiment analysis feature for the application using vader_sentiment API
▸ Worked with the Twitter API for tweet scraping

Motion Detector with PIC microcontroller
▸ Programmed a PIC16F877 microcontroller in assembly language for a motion detector system
▸ Built a communications circuit that consisted an RS232 serial port and a Max 232 integrated circuit for updating the firmware of the PIC since a boot loader had been programmed on it

LC-3 VHDL design
▸ Designed and connected components for a simple microcomputer that uses the LC-3 instruction set in VHDL
▸ Designed the control unit for decoding and executing instructions as a Finite State Machine
▸ Wrote VHDL test benches for design verification with a sample program

Tam's Online Shop
▸ Developed an online shopping site using Java's Spring MVC Framework and MySQL database
▸ Developed a secure authentication module with password encryption to allow users login to add items to their cart and allow administrators login to manage (add, edit and delete) products in inventory

activities

Community Service Chair @ Institute of Electrical and Electronics Engineers
Jan 2020 – Current
▸ Organized volunteer events at the D.C. Cherry Blossom Festival and charity fundraisers for over 20 members of the organization

Chief Financial Officer @ Howard University Robotics Organization
Aug – Dec 2019
▸ Organize fundraisers, raising more than $350 for the organization
▸ Organized club events which included short lectures and simple Arduino robotics team projects for over 20 students

education

Howard University
2017 – 2021 // Washington, DC
Bachelor of Science in Electrical Engineering
GPA: 3.97

skills

Programming
Python, Java, C/C++, MATLAB, Git, SQL

Computer Aided Design
Siemens NX, Cura

Machine Learning
Turi, OpenCV

Electrical Engineering
Embedded Systems Design, VLSI Design, VHDL

awards

Best Social Hack
#BisonHacks 2020
▸ Won the J.P. Morgan Chase award for project with best social impact for small black businesses at the #BisonHacks hackathon

Apple HBCU Scholar
Thurgood Marshall College Fund
▸ Awarded a scholarship and a 12 week Apple internship as an exceptional student in a HBCU

1st Place
Google D.C. Hackathon 2018
▸ Worked with a team of 5 engineers on a series of 12 coding challenges in Python and won first place after the judges' review

Presidential Scholar
Howard University
▸ Obtained the most selective scholarship awarded to an incoming freshman based on academic performance. Covers the total cost of attendance for the duration of study