Melina Dominique Moore

Phone: (832) 314-9901 Email: mdmoor21@cougarnet.uh.edu

<u>Summary:</u> Computer engineering student with experience in creative problem-solving, pursuing a co-op or full-time role to gain technical knowledge and work with a team to deliver innovative solutions for complex business problems.

Education

University of Houston Graduation: Spring 2025

Bachelor of Science - Computer Engineering

Current Relevant Courses: Digital Electronics, Embedded Microcomputer Systems

Projects

STEMINISTS Website

February 2024 - June 2024

GPA: 3.4/4.0

Project Lead with Code [Coogs]

- Managed a team of seven to develop a website honoring women in STEM using HTML, CSS, and JavaScript.
- Directed and mentored all team members to each create unique STEM themed games
- Established weekly meetings to meet project timelines and foster a cohesive team environment, resulting in a successful and fully functional site

Diesel Generator Monitoring Device

February 2024 - May 2024

- Designed and implemented using RTOS and TI Launchpad, integrating GPIO sensors and real-time alarms to detect and alert for failure modes such as fuel depletion and radiator leaks.
- Collaborated and debugged throughout the semester to deliver a functional prototype and comprehensive documentation, while improving teamwork and version control through GitHub.

Coffee and Tea Level Indicator

August 2023 - December 2023

• Designed using Multisim, debugged and built a circuit to indicate liquid levels in large containers of coffee and tea, adapting a pre-existing schematic for different beverage resistivities.

MATLAB App Design - History of Water Contamination in Hinkley, California

February 2022 - May 2022

Project Lead

- Developed an object-oriented program in MATLAB to create several interactable components
- Collaborated in a group to create an app about water contamination levels, in which I advanced skills in user interface and data cleaning techniques

Work Experience

Cullen College of Engineering Undergraduate Program Houston, TX

August 2022 - Present

Teaching Assistant

- Instructed over 300 students through difficult concepts to develop code using MATLAB
- Learned to swiftly adapt by tailoring instructions to each individual students' needs in weekly office hours
- Increased the course pass rate by 16% through one-on-one tutoring and peer support

Cullen College of Engineering Undergraduate Program Houston, TX

August 2023 - Present

Curriculum Development Specialist

- Developed an engaging curriculum for Introduction to Computing and Problem-solving for Engineers with Dan Burleson to help students learn through coding games in MATLAB language and app design
- Revived students' passion for engineering and problem-solving through creative coursework

Leadership Experience

Code [Coogs] - Activities Director

June 2024 - Present

• Arranged weekly social events, increasing the membership by 25%

STEM Honors Society - Member and Grant Recipient at Galveston College

January 2018 - July 2019

• Achieved recognition from the STEM Honors Society as both a scholarship and research grant recipient

Rotary International - Student Ambassador in Três Lagoas, Mato Grosso Do Sul, Brazil

August 2016 - June 2017

Gained skills in communication and adaptability while living abroad in Brazil

Skills and Proficiency

- Fluent in English and Spanish
- MATLAB (Advanced)
- C++ and C (Advanced)
- HTML, CSS, JavaScript (Advanced)
- ARM Assembly (Intermediate)
- SimUAid (Intermediate)
- Python (Intermediate)
- R (Beginner)