DANIEL A. MUNOZ

dani0741@gmail.com ~ 214-517-1348 ~ Miami Lakes, Florida 33014

EDUCATION

Florida International University (FIU)   **Miami, FL**
Bachelor of Science in Electrical Engineering   *August 2021 – August 2024*
Collin College   **Plano, TX**
Associate of Science in Electrical Engineering   *June 2019 – June 2021*

SKILLS

Technical: Mechanical and Electrical Areas, Circuit Design, Hardware Design, Soldering, Harnessing, Programing, troubleshooting, and 3D Printing.
Technical Programs: Fusion 360, Cadence, VS Code, LTspice, Multisim, KiCad, Microsoft Programs, ROS, and Linux.
Programing Languages: C, C++ and Python.
Languages: Spanish and English.

WORK EXPERIENCE

Electrical Engineering Intern   *January 2023 – May 2023*
General Electric Appliances
- Designed and tested circuits for advanced UI features in appliances, ensuring seamless functionality.
- Implemented sensor-based movement detection for responsive and intuitive appliance controls.
- Conducted thorough device comparisons to identify the most effective and cost-efficient solutions for new feature integration.

Dell Brand Representative   *October 2022 – January 2023*
2020 Companies
- Demonstrate, sell, and promote Dell products to retailers in the assigned market.
- Provide training and support to Retail Sales Associates and store Leadership.

PROJECTS

Presences sensing
- Engineered presence sensing system using Infrared sensors to detect the proximity of individuals and activate lighting when within close range. Executed thorough testing to ensure peak precision and performance.

Autofill Feature
- Assisted in the development of an Ultrasonic sensor-based circuit with filtering capabilities for precise cup filling and conducted extensive testing and circuit modifications to achieve optimal performance.

Autonomous Robotic Arm
- Use TPU USB Accelerator in a 3D print robotic arm to run objects detection and recognition of different recycling objects.

Autonomous Telescope
- Modify and program a telescope using Arduino with Encoders and GPS to get the exact location it is pointing.

Arduino Powered Micro Quadruped
- Developed a compact, Arduino-controlled four-legged robot, designed for real-world leg movement and locomotion.
- Conducted detailed design modifications using Fusion 360 for robotic leg components, alongside comprehensive circuit, and code testing, contributing to the understanding of quadruped locomotion principles.

Undergraduate Research with Boston Dynamics' Spot Robots
- Analyzed Boston Dynamics' Spot robot codebase and produced comprehensive usage documentation.
- Proficiently employed Linux, ROS, and virtual environments for robot control, furthering expertise in robotics and software development.

LEADERSHIP/STUDENT ORGANIZATION

President | Panther Robotics   *May 2023 – Present*
- Led a team of 20 executive board members and facilitated active participation of 70+ members.
- Made critical decisions on club activities, projects, collaborations with other organizations, and managed club funds effectively.
- Led successful events, workshops, and robotics projects with outstanding results and high participation.

VEX-U Captain | Panther Robotics   *May 2023 – Present*
- Leading the team in robot design, programming, and mechanical aspects for competitions while enhancing team members' technical skills.
- Managed team logistics, including budgeting, scheduling, and resource allocation for successful VEX U competition participation, while coordinating effective competition strategies and problem-solving with team members.

Fundraising Director | Panther Robotic   *August 2022 – May 2023*
- Create and reach for companies or events to raise funds and show our work.

Ambassador | Venezuelan Student Alliance   *August 2022- November 2022*

- Managed event coordination introduced students to relevant news and activities and guided their active participation.