Zoe Mullins

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Objective To obtain an internship working with electronic instrumentation and/or programming for the summer of 2021.

Education

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY (ERAU) Daytona Beach, FL
Bachelor of Science, Engineering Physics May 2022

- Concentration in Spacecraft Instrumentation, minors in Computer Science and Applied Mathematics. **3.74 GPA.**
- Student-athlete/Women's Lacrosse
- Dean's List student 2019 & 2020
- Completed courses of Calculus 1, 2, & 3, Scientific Programming in C, Engineering Chemistry, Graphical Communications (CATIA), Space Science, Physics 1, 2 & 3, **Digital Circuit Design**, and Spaceflight Dynamics, Differential Equations, Microprocessor Systems, Computer Science 2 (Java), and Modern Physics
- Current courses: Classical Mechanics, Space Systems Design, Space Systems Engineering, Signals and Systems, Mathematical Methods for Engineers

Skills

Technologies/Programming

- **Python** and **JavaScript** (5 years)
- jQuery, HTML5, Java (4 years)
- C, C++, MatLab (1 year)
- Linux OS
- CATIA and AutoCAD
- Digital Logic and Circuit Design
- Splunk Fundamentals Certificate
- Microsoft Office

Work Experience

Code Ninjas San Antonio, TX
Programming Instructor April 2018-December 2020

- Teaching students ages 7-15 courses in **Python, JavaScript** and digital logic
- Assisting with projects in JavaScript, Lua, HTML and block-coding in a classroom setting
- Developed both Python and Digital Logic curriculum

SAF/CDMA Tampa, FL/Remote
Machine Learning/DEVOPS Intern January 2021-May 2021

- Working with Python ML programs and AI to predict the impact that quantum computing will have on national security threats within the next 5-20 years

Projects

Designing and Creating Circuits - 2 person team

- Made various circuits throughout the semester using Arduino including a traffic light system and a security system
- Applied extensive use of logic.ly for designing a multiplexer

"Starship" Program in C– Solo project

- Use of file.io to create graphs in C
- Worked with modularizing programs
- Applied statistical analysis and principles of physics throughout the program

Blender Redesign – 3 person team, Team Leader

- Used engineering skills, problem-solving and CATIA to improve a Nutribullet blender
- Used CATIA to prove our blade enhancements made the blender more efficient

Satellite Python Program – Solo Project

- Extensive work in **Python** libraries such as Matplotlib and Numpy to develop a simulation for satellites travelling and how gravitational pull affects their path of flight