



OBJECTIVE Strong mechanical engineer able to optimize complex projects and find creative solutions via programming to achieve team goals. **Experienced in many programming languages (C, C++, Python, C#)**. Special interest in **humanoid robotics and prosthetics**. Currently seeking internships in robotics, biomedical engineering, and software systems. Strong foundation in biomechanics, experienced with OpenSim.

EDUCATION Embry-Riddle Aeronautical University Daytona Beach, FL
Bachelor of Science, Mechanical Engineering May 2025
Biomedical Systems Track GPA: 3.8 / 4.0

PROJECT **Dynamics Grader | Embry-Riddle Aeronautical University**

EXPERIENCE Learned how to follow student's problem-solving process to identify mistakes that they made on course assignments. Provided personalized feedback, and worked closely with the professor to improve the course by helping students reach learning objectives.

ALU Circuit Design | AUS Computing Camp

Applied Boolean algebra, electronics, and circuit design knowledge to design a 2-bit Arithmetic Logic Unit circuit used as a part of building a simple CPU, which was then tested for successful calculations of 1-bit numbers.

Drone Simulation Project | MATLAB & C# Programming Course

Used course knowledge of C# to debug and fix a faulty drone simulation.

Utilizing Control systems knowledge, sorted through the different control systems and control surfaces for each script. Identified faulty stabilizer code resulted in an unbalanced force on the drone body that caused an uncontrolled rotation and pushed update to drone.

SKILLS **Technical:** Biomechanics, Numerical Methods, Python, C++, C#, Machine Design, Heat Transfer, Material Science, Mechanical Vibrations, Thermodynamics

Best Soft Skills: Critical Thinking, Leadership, Adaptability, Verbal and Written Communication

Software: OpenSim, Source Control, Git, GitHub, Visual Studio, CATIA V5, SolidWorks

PERSONAL PROJECTS **Brain Bash! – Personally Built Website: Simplifies Complex Engineering Concepts**

December 2022 – Present

Developed and managed website hosted on GitHub. Required extensive used of source control systems (Git) including managing a local and live version of the website, rolling back errors on the live version, and managing package differences on the cloud.

Video Game Development

2018 – Present

Participated in many game jams: worked collaboratively and lead teams to create games from scratch under time constraints (usually 48 hours). Used many different engines and programming languages.

Raspberry-Pi Mini Truck

2018

Assembled and programmed a mini truck using Python with a 3 degree of freedom arm, and various sensors including a front-facing camera, ultrasound proximity sensor, and color sensor.

Utilized skills for Internet of Things (IoT) and Linux to relay live video feed to a remote computer.

Researched and optimized transmission of video data structure across the network for smooth playback.

CERTIFICATES Google IT Automation with Python, January 2023
American University of Sharjah Computing Camp, December 2020
Unique World Senior Robotics Course, October 2020
Fundamentals of Red Hat Enterprise Linux, August 2020