Gregory Dsouza

http://gregorydsouza.github.io | gregory@ggg777.com | 386.278.0718

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 and 3D Slicer.

EDUCATION

B.Sc. Mechanical Engineering
Embry-Riddle Aeronautical University
May 2025 | Daytona Beach, FL
Cum. GPA: 3.8

LINKS

Portfolio: **Gregory's Portfolio**
Github: **gregorydsouza**
LinkedIn: **Gregory Dsouza**

COURSEWORK

UNDERGRADUATE

Biomechanics
Biofluids
Biosolids
Mechatronics
Finite Element Analysis
Numerical Methods + Algorithms
Mechanical Vibrations
Heat Transfer
Material Science
Machine Design

SKILLS

SOFTWARE

OpenSim, 3D Slicer, Source Control, Git, GitHub, Visual Studio, CATIA V5, SolidWorks, ANSYS Workbench, Blender, OpenCV, Linux

BEST SOFT SKILLS

Critical Thinking, Leadership, Adaptability, Verbal and Written Communication, Time Management, High Stress Environments

PROGRAMMING

Python, C, C++, C#, Matlab
Java, JavaScript, HTML, CSS
GLSL, HLSL, Cg

OTHER

CPR Certified (Actively Maintained)
Trained in First Aid

PROJECT EXPERIENCE

INDIENOMICON MEGA HEALTH JAM | Lead Programmer

September 2024 | Orlando, FL

- Lead team of six who had no prior experience with rapid prototyping to create a game in **under 48 hours**
- Trained team members to use an unfamiliar framework (Godot) while simultaneously coordinating software design and structure
- Presented final project to a panel of judges and other contestants

OCEANS OF HOPE | Adaptive Kayaking Mechanism

August 2024 – May 2025 | Daytona Beach, FL

- Designed actuator-driven assistive kayak mechanism to aid paraplegic motion, using custom sensor inputs and feedback control.
- Aided with redesign of a non-permanent mounting system of the mechanism to the base of the kayak.
- Submitted regular progress reports and coordinated stakeholder's needs and incorporated them into mechanical design.

BRAIN BASH! | Engineering Blog

December 2022 – Present

- Implemented Git-based source control workflow across live/staging branches for personal engineering blog.
- Required extensive used of source control systems including managing a local and live version and managing package differences on the cloud.

WORK EXPERIENCE

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY | Teaching Assistant

September 2024 – Present | Daytona Beach, FL

Actively assisted students in their lab with learning various Numerical Methods and how to code them in Matlab. Reviewed class material and provided feedback to help improve the course. Provided supplementary information and resources to help students reach their learning outcomes.

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY | Dynamics Grader

January 2024 – May 2024 | Daytona Beach, FL

Learned how to follow student's problem-solving process to identify mistakes that they made on course assignments. Provided personalized feedback and graded assignments according to course deadlines. Worked closely with the professor for the course to identify areas where students were struggling.

CERTIFICATES

January 2023	Google IT Automation with Python
September 2022	American Heart Association Heartsaver CPR & AED
October 2020	Unique World Senior Robotics Course
August 2020	Fundamentals of RedHat Enterprise Linux