Carlos Carrasquillo

Phone: (787) 668-8096 • E-Mail: c.carrasquillo@ufl.edu • GitHub: https://github.com/CarlosCarras

Education

University of Florida   **August 2017 – Present**
Current GPA: 3.7 /4.0

- Bachelor of Science, *Mechanical Engineering*, University of Florida   **Expected May 2021**
- Bachelor of Science, *Computer Engineering*, University of Florida   **Expected May 2021**

Honors Program

Relevant Coursework

                                                                                                                                 August 2017 – Present

- EML4312 Control of Mechanical Systems
- EML3005 Mechanical Design 1
- EGN3353C Fluid Mechanics
- EML3100 Thermodynamics
- EGM3401 Dynamics
- EGM3530 Mechanics of Materials
- EML2023 Computer-Aided Design
- EGM2322L Design and Manufacturing Laboratory
- EGM3343 Numerical Methods using MATLAB
- EML3301C Mechanics of Materials Laboratory
- STA4321 Probability
- EEL3111C Circuits 1
- EEL3701C Digital Logic and Computer Systems
- CDA3101 Computer Organization using ARM
- COP3530 Data Structures and Algorithms using C++
- EEL3135 Introduction to Signals and Systems
- EEE4773 Machine Learning
- EEL3744C Microprocessor Applications
- CEN3031 Software Engineering

Experience

TA for EML2322L Design and Manufacturing Laboratory   **May 2019 – Present**

- Supervising manufacturing for design teams, providing design and manufacturing guidance to students, grading design reports, working on projects to enhance the lab. Solidworks is used for the design process.
- Teaching groups of four to five students at a time about the proper use of shop equipment (e.g. milling machines, lathes, sheetmetal equipment, etc.).

Undergraduate Research at ADAMUS Lab   **January 2019– Present**
- Developing code for a Cube-Sat using ROS, C++ and Python.
- Using command line to configure network settings on BeagleBone Black.

TA for EGM3344 Numerical Methods   **May 2019 – August 2019**

- Helped students write code for optimization, Fourier analysis, regression, interpolation, numerical integration/derivation, etc.
- Gave lectures on Fourier Analysis, graded MATLAB homework submissions.

Lowe's Associate- Paint Department   **April 2018 – August 2018**

- Handled inventory, gave DIY recommendations, mixed paint, assisted fellow associates in hardware.

Student Organization Participation

Students for the Exploration and Development of Space   **June 2019 – Present**

- Designing and manufacturing a reflector telescope utilizing Solidworks.
- Planning events and activities for the physics department.

Skills

- *Programming Languages*: Java (3 years) , C++ (2 years), MATLAB (2 years), Python (1 year), and JavaScript using Node.js (0.5 years)
- *Frameworks*: ROS, Express
- *Databases*: MongoDB
- *CAD*: Solidworks [Certification: Associate (2018 - 2019)], Fusion 360, Inventor
- *Development Processes*: Agile
- *Languages:* English and Spanish