

Carlos Carrasquillo

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Education

University of Florida

Current GPA: 3.7 /4.0

August 2017 – Present

- Bachelor of Science, *Mechanical Engineering*, University of Florida
- Bachelor of Science, *Computer Engineering*, University of Florida

Expected May 2021

Expected May 2021

Honors Program

Relevant Coursework

August 2017 – Present

- EML4314C Dynamics and Controls Lab
- EML4220 Vibrations
- EML4312 Control of Mechanical Systems
- EGM3343 Numerical Methods using MATLAB
- EML3301C Mechanics of Materials Laboratory
- EML3005 Mechanical Design 1
- EGM2322L Design and Manufacturing Laboratory
- EEL3923C: Electrical Engineering Design I
- EEL4712: Digital Design
- 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

SwampHacks VI Infinite Energy's Best Hack Award Recipient

January 2020

- Participated and won an award at a hackathon hosted by UF for proposing a solution to the problems with current hurricane relief efforts.
- Developed the front-end for rtrescue.tech.

Students for the Exploration and Development of Space

June 2019 – Present

- Designing and manufacturing a reflector telescope utilizing Solidworks.

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