# JOEL **MONTANO** UNDERGRADUATE RESEARCHER

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Orlando, FL

in joelmontanoucf

**○** loel430

## Skills

### **PROGRAMMING LANGUAGES**

Python

HTML

**CSS** 

**Javascript** 

Java

### **SOFTWARE**

Visual Studio Code

Git

Anaconda

Spyder

CodeBlocks

MatLab

Microsoft Office Suite

Adobe Suite

#### **OTHER**

Bilingual (English & Spanish)

## **Education**

University of Central Florida B.S. Civil Engineering 2020 Minor Computer Science 2020

**GPA: 3.5** 

## **Employment**

## University of Central Florida

Orlando, FL

Undergraduate Researcher

Nov. 2018 to Current

Aug. 2015 to Current

- · Applied Machine Learning clustering methods (K-means) to model storm-surge data and identify any correlation between storm strength and max storm-surge.
- Utilizing linear regression and clustered data to determine the most influential component of storms that contributes to max storm-surge height.
- Implemented algorithms with Python 3.7 and libraries such as Pandas, NumPy, and SciPy.
- Collaborated with my faculty advisor to advance the research and implement new lesson

### Lane Construction

Orlando, FL

Engineering Intern

May 2018 to Aug. 2018

- Field Engineer on the \$2.1 billion I-4 Improvement project, assisting the project engineers and project managers.
- Drafted technical reports that detailed the tasks that the foreman and crew had to accomplish daily, related to project scope, schedule, and design drawings.
- Tracked, logged, and charged invoices for sub-consultants and third-party services.
- Co-led weekly cost meetings where production, labor, quantity, and costs of the project were discussed with the superintendents, engineers, and project managers.

## **Awards**

University of Central Florida · Dean's List (Multiple Semesters) GPA of 3.5+ for the semester

Ian. 2016

### Activities

Society of Hispanic Professional Engineers • Executive Board Member, Director of Freshman Affairs lan. 2016 to May 2016

- Voiced concerns to the board and implemented solutions regarding divides between upperclassmen and underclassmen.
- Increased freshman and sophomore retention rates by organizing events catered to underclassmen, reducing any intimidation of events being too technical or advanced.

Society of Hispanic Professional Engineers •

Aug. 2016 to May 2017

Executive Board Member, SHPE Jr. Chair

- Established SHPE Jr. chapters at three local high schools to promote STEM in underrepresented communities.
- Organized the SHPE Jr. conference where 50 local K-12 students attended to learn about STEM and attended workshops by industry professionals.

Society of Hispanic Professional Engineers • Executive Board Member, Event Chair

Aug. 2017 to May 2018

- · Planned social events and the end of year gala to increase member retention and keep morale of the club high.
- Organized E-board and member meetups, to increase transparency within club operations and establish closer relations with the board.
- Budgeted and raised \$4,000 for the year for all our events and gala.