# Mahatru Miryala

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LinkedIn GitHub

#### **EDUCATION**

#### University of Central Florida: Orlando FL

Computer Science, Class of 2025 - Dean's List

Burnett Honors College

Suncoast Community High School: Riviera Beach FL

Honor roll - 9, 10, 11, 12

### **EXPERIENCE**

#### Undergraduate Research Assistant - Dr. Joon-Hyuk Park (02/08/22 - Present) - 10 Hrs/Wk

- Utilizing Python to contribute in researching object recognition, hand tracking in 3D space, and LiDAR-based indoor navigation to aid people with disabilities in navigating their environment
- Convolutional Neural Networks and Hidden Markov Models in gesture-to-sound conversion

## **PROJECTS**

### NASA L'SPACE Mission Concept Academy

(01/22 - 04/22) - 10 Hrs/Wk

- Worked with NASA engineers in a workforce development program, the goal was to design logistics and science for a lunar mission to identify Oxygen deposits for future moon bases
- Serving as the Astrobiologist on the Science sub-team, developed and presented a 78 page PDR

## **Trash Trek Challenge**

2015-16

- Led the programming and project teams to win an FLL competition, presenting our solution to clean orbital debris and completing tasks on a board with our Lego robot
- Presented the project to scientists at JPL for review and approval

IB Calculus IA

2019

• Calculated escape velocity, gravitational transfers, and other variables using calculus required for a trip to Mars using a Saturn V rocket

## **IB** Extended Essay

2020

• Learned Python and built and tested a neural network to predict COVID cases and deaths on a regional basis

Sea The Future 2020

• Submitted an augmented reality app utilizing C++, OOPS, and APIs in Unreal Engine 4 for the Congressional App Challenge

#### EXTRACURRICULAR ACTIVITIES & LEADERSHIP

- (HS) Boy Scouts Eagle Scout, Historian, Webmaster, Assistant Patrol Leader
- (HS) Tae Kwon Do Instructor
- (HS) Computer Club Social Media Director
- (HS) Post57 Vice President of Administration
- (HS) Machine Learning Club Co-Vice President
- 2021-22 AIAA member, various workshops and competitions
- 2021-22 Knight Hacks member, Hackathon 2021 Competitor

## **VOLUNTEERING EXPERIENCE**

Cole Preston Foundation (Growing plants at a local garden to donate to homeless shelters, helped make and manage the website)

Boy Scouts Activities (Various volunteering opportunities)