## Sarinda Samarasinghe

8651 Pebble Creek Ln, Jacksonville, FL 32256, (904) 803-1587, sarinda.samarasinghe@ucf.edu

**Education:** 

**University of Central Florida 2021-Present** 

Ph.D. in Computer Science UCF Center for Research in Computer Vision

Advisor: Dr. Mubarak Shah

**University of Central Florida 2017-2021** 

Bachelor of Science in Computer Science Bachelor of Science in Mathematics

**Awards & Honors:** 

UCF National Honor Society in Mathematics Member UCF President's Honor Roll UCF Provost Scholarship recipient 2017 – 2021 UCF Dean's List

**Skills Summary:** 

Programming Languages: Python, Java, C/C++ , R , ROS Machine Learning: Pytorch/TensorFlow/Keras

Operating Systems: Windows, Linux

**Research Papers:** 

• Sarinda Samarasinghe, Mamshad Nayeem Rizve, Navid Kardan, Mubarak Shah; CDFSL-V: Cross-Domain Few-Shot Learning for Videos; International Conference on Computer Vision (ICCV 2023)

**Funding Projects:** 

Hidden Activity Signal and Trajectory Anomaly Characterization (HAYSTAC) by IARPA 4/2023 – Present

Worked on anomalous trajectory insertion and anomalous trajectory detection.

Biometric Recognition and Identification at Altitude and Range (BRIAR) by IARPA 5/2022 – 8/2023

• Worked on cross-domain few-shot learning for training on ground camera videos and testing on drone videos. Also worked on feature fusion for multiple retrieval methods.

**Other Projects:** 

Fortuna V2, https://fortunacombat.com/

- Continuation of a Web-based, Programmable Tank Strategy Game
- Teaches beginners programming skills with a Scratch-like coding language

**QOurs Image Detection** 

- A drawable QR code alternative that consists of basic shapes
- Image detection converts a photo of up to 16 shapes on a grid into a hash code for link storage

**Relevant Experience:** 

Bioinformatics Research 3/2020 – 12/2020

- Studied and implement algorithms to analyze and identify various species in genetic sequence samples.
- Optimize algorithms to maximize speed and minimize RAM usage.

**UCF Programming Team Member** 

9/2019 – 9/2020

• Studied various programming algorithms and participate in the International Collegiate Programming Contest (Mercer Spring Programming Contest) as a representative of UCF o Team UCF Requiem placed 2<sup>nd</sup> in the 2020 Senior Division (Highest placement of the UCF teams)

## Real-Time & Intelligent Systems Lab Autonomous Mobile Robots

12/2018 - 5/2019

- Researched path planning methods to steer an autonomous 1/10th scale Formula 1 race car
- Utilized ROS, Gazebo, and Turtlebot3 to implement and test path planning algorithms

**Additional Experience:** 

Math Tutor 8/2014 – Present

Freelance tutor students ranging from middle school students to college students