

# Sarinda Samarasinghe

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## 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 (With Honors) Bachelor of Science in Mathematics (With Honors)

### 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