

# Angelo Carrabba

Junior Computer and Mathematical Sciences Student

tel: (843)290-9554 email: [acarrab@g.clemson.edu](mailto:acarrab@g.clemson.edu) web: <https://people.cs.clemson.edu/~acarrab/>

## Research Experience

### Human-Centered Cloud Robotics

*Clemson University  
Aug. 2016 - Present*

### Research Scientist

Python

- Analyzing pubsub architectures performance in realtime environments, or well realtime simulations.
- Simulations done in Mininet with python scripts for generating the network topology.
- Looking specifically at MQTT and Kafka

### DIMACS

*Rutgers University  
June 2016 - Aug.  
2016*

### Research Science Internship

Python

- Determined through self-created simulations that there were no sharp transition in traffic, based on changes in robot size and start-end locality.
- Created a simulation in python, with graphics created with pygame.
- Wrote research paper detailing results and specific methods used.

### Applied Algorithms Lab

*Clemson University  
Jan 2016 - June  
2016*

### Research Assistant

JavaScript

- Implemented DTW Search with modifications to improve result quality with noisy signal.
- For EEG database to add search functionality for Neurologists at MUSC research hospital.

### Virtual Environment Group

*Clemson University  
Sep. 2014 - Aug.  
2015*

### Research Assistant

C

- Designed computer vision software in C, OpenGL, and GLUT.
- Worked on software for calibrating camera image distortion through analysis of an image of a checkered board.
- Created basic edge detection processing.

## General Experience

*Clemson University  
Oct. 2015 - Present*

### Programming Team

- Placed 14th out of 45 in South East Regional Programming Competition. (Fall 2016)
- Placed 86th out of 200 in NAIPC invitational Programming Competition. (Spring 2016)
- Attended Mercer University Spring Programming Contest. (Spring (2016)

*Clemson University  
Aug. 2016 - Present*

### Lab Teaching Assistant

- Help teach students programming concepts in Algorithms and Data Structures as well as 2nd semester intro Computer Science.
- Help students debug their code and understand how to narrow down where the possible problems are.

*Clemson University  
Aug. 2015 - May  
2016*

### EcoRep

- Promoted sustainability on campus while collaborating with other oncampus groups with same focus.
- Lead food and clothing donation within campus living community

## Education

*Clemson University, Clemson SC*

- GPA: 3.86/4.00
- B.S.: Computer Science
- Minor: Mathematical sciences
- In Calhoun Honors College
- Pursuing Departmental Honors in Computer Science

## Computer Skills

- Python
- C++/C
- Javascript
- HTML/CSS
- Java
- SAS
- R

## Familiar With

- Kafka
- MQTT
- Low-Level Networking (TCP/IP, UDP)
- Operating Systems

## Relevant Coursework

- Algorithms and Data Structures
- Theory of Probability
- Differential Equations
- Linear Algebra
- Software Engineering
- Networks and Network Programming
- Computer Systems Organization