

Angelo Carrabba

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Education

Clemson University

August 2014–May 2018

- General and Departmental Honors (Calhoun Honors College)
- Bachelor of Science in Computer Science
- Minor in Mathematical Sciences

GPA: 3.82/4.00

Programming Languages

General:	C++	Python	Java	C#	C	R
Web:	JavaScript	HTML/CSS	React	TypeScript	AngularJs	

Research

Data Mining Research, Algorithms and Computational Science Lab @ Clemson Fall 2017–Now

- Comparing research papers' abstracts (only) and full-texts (including abstracts) as data input for research hypothesis generation algorithm.
- Working on increasing quality of data by extracting relevant data from full-texts.
- Preprocessed text, used regex and NLTK to parse text, applied LDA Topic Modeling, applying FastText.
- Worked with large data input (over 1 million documents; over 30gb of textual data).

Research Assistant, Human-Centered Cloud Robotics @ Clemson

Fall 2016

- Analyzed pubsub architectures performance in real-time environments through MiniNet.
- Created network topologies and then simulations in python.
- Collected data/created graphs and plots to analyze difference in performance of MQTT and Kafka.

REU Program @ Rutgers University with DIMACS

Summer 2016

- Studied agent interaction in multi-agent environment.
- Created simulations in python with graphical representation using pygame.
- Developed path planning algorithm to monitor traffic increase caused by parameter changes.
- Wrote a research paper on results.

Research Assistant, Applied Algorithms Lab @ Clemson

Spring 2016

- Implemented efficient DTW Search in JavaScript based upon research paper.
- Ran on EEG data in order to search for spikes indicative of epilepsy.

Research Assistant, Virtual Environment Group @ Clemson

Fall 2014–Spring 2015

- Designed/wrote computer vision software in C for calibrating camera image distortion, with edge detection processing.

Work

WSBF Radio Station Computer (Software) Engineer @ Clemson

Fall 2017

- Building music playing software on Electron Framework with Angular (for DJ and automation use).
- Maintaining website functionality, as well as adding new functionality.

Full-Stack Software Engineering Intern @ Blackbaud

Summer 2017

- Created database monitoring software with web technologies (angular based on ASP.NET framework).
- Wrote software for editing and manipulating data within database.
- Created algorithms and data structures for connecting data flow between different database pods.

Lab Teaching Assistant @ Clemson

Fall 2016–Spring 2017

- Co-taught Algorithms and Data Structures lab as well as CPSC 1020 lab.
- Graded lab assignments and homework for Algorithms and Data Structures.

Team

Programming Team @ Clemson

Fall 2015–Fall 2017

- South East Regional Programming Competition
 - Mercer Programming Contest
 - NAIPC Invitational Programming Competition
- Placed: 10th out of 45 (**Fall 2017**), 14th out of 45 (**Fall 2016**)
Placed: 6th out of 37 (**Spring 2017**), 7th out of 40 (**Spring 2016**)
Placed 86th out of 200 (**Spring 2016**)

CUHackIt Website Development Help and Logistics (Clemson Hackathon)

Fall 2017–Now

- Working with other clemson students to put together CUHackIt, Clemson's first undergraduate ran Hackathon

HackGT (Hackathon @ Georgia Tech)

Fall 2017

- Applied LDA Topic Modeling to recipe database then ran k-nearest neighbors to generate adjacency matrix
- Set of documents and word counts were recipes and ingredient counts, respectively.
- Created web-app to walk through graph generated from nearest neighbors in recipe embedding space.

Off The Grid (Company sponsored hackathon @ Blackbaud)

Summer 2017

- Created form sign up tracking in order to generate graph of form spread to monitor outreach rate.

School

Deep Learning with NVIDIA Tesla P100 GPUs (Capstone Project @ Clemson)

Fall 2017

- Helped orchestrate setup of hardware architecture for deep learning (server and software).
- Creating tool through google deep-dream and tensor flow to express learned features and layer outputs together.

Personal

Website Development @ acarrab.github.io

Fall 2017

- Developed personal website with React and Typescript.
- Developed navigation for my older website in which navigation was done through graph of nodes representing pages.