

Charleston, SC · alex@alexday.me · https://www.alexday.me

EDUCATION

Clemson University

Clemson, SC

September 2020 - Present Ph.D. Computer Science (GPA: 3.8/4.0)

Clarion University of Pennsylvania

Clarion, PA

B.S. Computer Science (cum laude)

August 2016 - December 2019

SKILLS

Programming Languages: Python (Proficient), C/C++ (Proficient), POSIX Scripting, C#, MATLAB

Linux (Proficient), Git/GitHub (Proficient), ROS, LATEX Technologies:

EXPERIENCE

Clemson University Motion Planning Lab

Clemson, SC

Graduate Research Assistant

September 2020 - Present

- Analyzing data and running studies related to real world human-robot interation (HRI) data
- Supervising undergraduate researchers, reviewing PRs, and writing HRI ROS frameworks
- Developed deep-learning based high level controllers in PyTorch for human inspired multi-agent navigation with another Graduate Student

Carnegie Robotics LLC

Pittsburgh, PA

Software Engineering Intern

Summer 2021, 2022 & Winter 2021, 2022

- Prototyped novel methods for validating and calibrating sensors intrinsics, extrinsics, and timestamps
- Developed new drivers and improved diagnostics reporting for a large ROS-based autonomous vehicle platform
- Reviewed and approved PRs related to sensor drivers and calibration tooling
- Designed, trained, and validated LSTM-based steering controllers using large amounts of visual data

JGMS Inc.

Grand Rapids, CO

Data Scientist (R&D)

May 2020 - September 2020

- Designed neural networks for massive document classification and bid prediction with Keras in Python
- Developed REST API using Flask to expose an endpoint for document summarization and classification
- Conducted market research to determine market gaps for future projects relating to computer security

PAPERS

A Study in Zucker: Insights on Human Robot Interaction

July 2023

- Created a simulation framework for human-robot interaction in ROS
- Developed novel motion tracking system based on the HTC Vive
- Analyzed trajectories to quantify human efficiency, benchmark SOTA trajectory prediction methods, and a enumerate an interaction law

LEADERSHIP AND INVOLVEMENT

Clemson University Graduate Student Government	Clemson, SC
Webmaster	May 2021 - May 2023
$Senator-Computer\ Science\ Department$	January 2021 - May 2021
Clemson University Intellectual Property Committee	Clemson, SC
$Graduate \ School \ Representative$	January 2021 - May 2023
Clemson University School of Computing	Clemson, SC
$Graduate \ Teaching \ Assistant$	August 2020 - May 2022
Association of Information Technology Professionals	Clarion, PA
President	August 2018 - May 2019
Vice President	August 2017 - May 2018
Awards	

Zucker Graduate Education Center PhD Grant PACISE 2020 Best Undergraduate Student Paper

January 2021

Spring 2023

Clarion University CS Dept. Student of the Month

December 2019 Fall 2018, Spring 2019

Clarion University Dean's List