

EDUCATION

Davidson College

Bachelor of Science, Cum Laude, Computer Science Major

Davidson, NC

May 2018- May 2022

- GPA: 3.58
- Relevant Coursework: Data Structures, Analysis of Algorithms, Machine Reasoning, Real-Time Systems

Adjacent Academies

San Francisco, California

Davidson in Silicon Valley

Summer 2019

- Learned HTML, CSS, JavaScript, Front-End and Back-End Web Development
- Relevant Coursework: Created attainsustain.org, built a Google Chrome extension that picks playlists based off one's mood

HONORS

Posse Foundation Scholarship

Full Tuition Scholarship Recipient

May 2018 - May 2022

Davidson College Sophomore Computer Science Award

Recipient

April 2020

Davidson College Senior Computer Science Award

Recipient

April 2022

RESEARCH EXPERIENCE

University of Texas at Austin, The Texas Advanced Computing Center

Remote

Undergraduate Researcher

June 2021 - March 2022

- Developed and designed an independent research project titled "Investigating Bias in Machine Learning Models for Homelessness Resource Allocation"
- Utilized the scikit-learn python machine learning library to create and evaluate the fairness of machine learning models
- Utilized the matplotlib python library to visualize fairness and interpretability metrics of the created machine learning models
- Prepared a poster presentation and corresponding paper for the end of summer National Science Foundation poster symposium

Davidson College Independent Study

Davidson, NC

Student Researcher

January 2021 - April 2021

- Worked with a Davidson Computer Science professor and two fellow students to design and develop a research project titled "Why You Should Diversify Your Syllabus"
- Created several Natural Language Processing Machine Learning models to measure and detect bias in language in published History papers

RISE

Davidson, NC

Student Researcher

May 2019 - June 2019

- Worked with a Davidson Computer Science professor on a project titled "Exploring Self-Teaching Game-Playing Algorithms"
- Compared the accuracy and efficiency between self-taught human-encoded chess programs
- Developed a method for automating and running specific chess puzzles on chess-playing programs and comparing their results

WORK EXPERIENCE

Project PRONTO

Davidson, NC

Web Developer

September 2019 - May 2021

- Worked with the Davidson Hurt Hub to create a user-friendly interface for scheduling student employees (built using the MERN Stack)
- Utilized MongoDB and other programs to store students' and clients' data

PRONTO++

Remote

Web Developer

June 2020 - August 2020

- Built an interactive interface using the RShiny framework for staff members to keep track of students who are currently working and registered to begin work

- Utilized SQL to store student data and manipulate student data on the front end

College Crisis Initiative

Remote

Data Collector

July 2020 - August 2020

- Collected data on College and University Fall 2020 reopening plans in relation to COVID-19
- Worked on a paper discussing and analyzing different Colleges and Universities technological resources for students through a lens of equity
- Collected updated and/or changed data on College and University Fall 2020 reopening plans in relation to COVID-19
- Provided data on Fall 2020 College and University reopening plans to the Center for Disease Control

Debbie Murcarsell-Powell Campaign Team

Remote

Intern

June 2020 - August 2020

- Worked on turnout calls for campaign events
- Reached out to potential donors and eligible voters as well as other field work
- Completed donor research using NGPVan and other campaign managing tools

LEADERSHIP & INVOLVEMENT

Latinas Promoviendo Comunidad/Lambda Pi Chi Sorority, Inc President

August 2021 - April 2022

- Design and carry out programming that advance the Sorority's vision, mission, and goals
- Educate on different Latine cultures and backgrounds
- Hold events and fundraisers that work towards the Sorority's service goals
- Volunteer at a bilingual elementary school and mentor Latine women and femmes in high school
- Work with other NPHC and Multicultural Greek organizations to spread awareness of our organizations and culture
- Work with the college's Greek administrative body to fulfill requirements and advance the campus community

D-CODE Co-founder and Co-chair

Summer 2020- May 2022

- An organization for BIPOC and Minority students exploring the field of Computer Science with a focus on their academic and professional development
- Work with Computer Science faculty to provide research opportunities and build community with faculty and students
- Hold mock interview sessions and other professional development programming
- Educate on and promote the intersections of Computer Science and other disciplines

Fits For Change Co-founder

Summer 2020 – May 2022

- An organization selling donated clothing online to raise money for social justice organizations and promote sustainability and slow fashion

The Student Initiative for Academic Diversity Equity Consultant and Co-Recruitment Chair

Fall 2019 -May 2022

- Interview candidates up for tenure track professor positions at Davidson College and provide assessment based on their commitment to diversity and inclusion in academia
- Manage application process for prospective members by reviewing applications and conducting interviews

Students Against Sexual Violence (SASV) Treasurer

Fall 2020 - Fall 2021

Turner Eating House Social Chair

Fall 2019 - Spring 2020

Turner Eating House Freshman Representative

Spring 2019

Davidson College Hackathon Participant

Fall 2018

- Built a website and presented it to the hosts and other participants

Women in Computer Science (WiCS) Member

Fall 2018 – May 2022

SKILLS

- Technical Tools: TensorFlow, scikit-learn, pandas, Numpy, Matplotlib, RShiny, Github, Git, SQL, MongoDB, OpenGL, React, Express.js, Bootstrap
- Technical Languages: Python, Java, JavaScript, HTML, CSS, R, C, C++, C#

PRESENTATIONS

- (Accepted) **Santiago, A.** Bowen, "Investigating Bias in Resource Allocation for Homelessness Prevention and Intervention," Practice and Experience in Advanced Research Computing Conference 2022 (Poster Presentation).
- (Accepted and Postponed Due to COVID-19 Pandemic) **Santiago, A.** Bowen, "Investigating Bias in Resource Allocation for Homelessness Prevention and Intervention," Emerging Researchers National Conference in STEM 2022 (Poster Presentation).

- **Santiago, A.**, A. Bowen, A. Solis, “Investigating Bias in Resource Allocation for Homelessness Prevention and Intervention,” NSF REU End Of Summer 2021 Poster Presentation (Poster Presentation).
- **Santiago, A.**, B. Santiago, S. Finkelstein, R. Ramanujan “Why You Should Diversify Your Syllabus,” Verna Miller Case Symposium at Davidson College Spring 2021 (Poster Presentation).
- **Santiago, A.**, B. Santiago R. Ramanujan, “ Exploring Self-Teaching Game-Playing Algorithms,” Summer Research Symposium at Davidson College 2019 (Poster Presentation).