

## 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).