# CLARA DIMARCO

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### OBJECTIVE

Driven by a vision to create a lasting impact in my community, my academic journey is marked by a commitment to both leadership and community engagement, showcasing my dedication to broadening access to computing and fostering inclusive educational environments.

#### EDUCATION

NC State University | B.S. in Computer Science | GPA: 3.73

May 2026

Grand Challenges in Engineering Scholar | STARS Computing Corps **B.S. in Mathematics** | Magna Cum Laude

May 2022

#### SKILLS

Languages: Java, C, Python, JavaScript, HTML, CSS

Technical: React JS, Tailwind CSS, Bash, Git, Mathematica, Excel

#### EXPERIENCE

#### Teaching Assistant | NC State Department of Computer Science | Raleigh

August 2024 - Present

- Mentor over 100 introductory Java programming students by providing guidance and constructive feedback for lab assignments, algorithm
  development, and software testing.
- Coordinate weekly office hours to deliver personalized, one-on-one support to students.

#### Research Assistant | SRCA REU Game2Learn Lab | Raleigh

May 2024 - August 2024

- Conceptualized and led a research project to identify optimal GPT-4 logic proof generation techniques, with the goal of enhancing its integration into NC State classroom software.
- Developed an innovative prompt engineering method to improve LLM performance in generating logic proofs.
- Programmed a Disjunctive Normal Form algorithm to solve propositional logic proofs.

#### Research Scientist | NASA Mission Concept Academy | Raleigh

May 2024 – August 2024

- Collaborated with an interdisciplinary team of engineering students to develop a lunar surface Mission Design, focusing on identifying water-ice and analyzing lunar volatiles in Permanently Shadowed Regions (PSRs).
- Developed scientific mission objectives and created a Science Traceability Matrix (STM) to effectively map mission requirements and instrumentation.
- Co-authored essential documentation including the Mission Definition Review (MDR), System Requirements Review (SRR), and Mission Concept Review (MCR), ensuring comprehensive planning and alignment with mission objectives.

## PROJECTS

#### Care Pack | Personal Project | NC State

August 2024 – Present

- Developing a responsive, cross-platform mobile application using Expo and React JS, integrating Clerk for robust authentication.
- Enhances student well-being by offering an anonymous tool that centralizes access to on and off-campus resources.

#### LEADERSHIP

#### Treasurer & Fundraising Chair | Grand Challenges Student Organization | NC State

August 2024 - Present

- Organize and facilitate events and workshops to support the Grand Challenges Scholars Program.
- · Oversee biannual fundraising initiatives, including hosting events and engaging with students on campus.

#### STARS AI Scholar | STARS Computing Corp | NC State

December 2023 - Present

- Led initiatives to engage K-12 students with disabilities, along with their families, to promote interest and accessibility in computing.
- Organized and hosted an outreach event for an elementary school robotics club, encouraging interdisciplinary career exploration.