



## EDUCATION

**Duke University**, M.S. Student in Mechanical Engineering and Materials Science

Anticipated Graduation: December 2022

Cumulative GPA: 3.533

Funded as GEM Full Fellow

**Santa Clara University (SCU)**, B.S. Mechanical Engineering with a Spanish Studies Minor

Graduation: 12 June 2021

Cumulative GPA: 3.682

## SKILLS

MATLAB & Simulink, SOLIDWORKS, Microsoft Office Suite, SAP2000, LaTeX, Spanish, Python, C++

## WORK EXPERIENCE

**Graduate Student Intern:** Lawrence Livermore National Laboratory (June-August, 2021)

- Worked remotely to support the Nuclear and Chemical Sciences Division on research concerning nuclear fallout formation and its environmental interactions
- Procured technical equipment to improve experimental benchtop setup

**Software Core Engineering Intern:** Maxar Technologies (June-September, 2020)

- Worked remotely within software and hardware validation lab, participated in leadership and professional development series
- Created design for Intern Design Challenge for a new Lunar Roving Vehicle, in response to a NASA public request for information

**Intern:** Shock & Gas Dynamics Lab., New Mexico Inst. of Mining and Technology (June-August, 2019)

- Built test setups to characterize turbulent environments using high-speed schlieren imaging and spectroscopic principles; developed a MATLAB image-processing script to analyze data
- Demonstrated improved data analysis and technical communication skills in final presentation

**Orientation Leader:** Center for Student Involvement, SCU (April-September, 2018)

- Worked with a broad range of staff and faculty to create cohesive summer programming; led groups of incoming students for 2-day sessions, supporting more than 120 students

## LEADERSHIP EXPERIENCE

**Assistant Director:** Johnson Scholars Program, SCU (2020-2021)

- Worked closely with director and administrator to create programming that fosters professional, academic, and personal development for over 30 scholars
- Sought creative ways to realize the theme of "Leading Through Crisis" on-campus and virtually

**President:** Pi Tau Sigma Mechanical Engineering Honor Society, SCU (2020-2021)

- Managed club activity with leadership team and seeks opportunities to grow the network

**President:** Food Recovery Network, SCU (2019-2021)

- Coordinated with leadership team to effectively salvage edible food for donation

**Johnson Scholar:** SCU (2017-2021)

- Selected from over 8k first-year applicants to participate in ten-student cohort for a 4-year leadership development program

## PUBLICATIONS

DiGregorio, S., Rivera, A., & Hargather, M. (2019, November). **A quantitative analysis of the chemical evolution of an iodine plume using optical filtering, imaging spectroscopy, and schlieren imaging.** In Astrophysics Data System.

<https://ui.adsabs.harvard.edu/abs/2019APS..DFDH11005D/abstract>