

EDUCATION

Liberal Arts and Science Academy
GPA: 4.442/4.00

Austin, Texas
2017–2021

EXPERIENCE

Astronomy Research

Independent and collaborative

Austin, Texas and Virtually
2019–Present

- Carried out a research project independently to determine whether the purported largest scale structure in the universe actually exists. Found that the structure, called the Hercules-Corona Borealis Great Wall, likely doesn't exist, and published my results in a leading astronomy journal.
- Currently working on a project studying the relationship between exoplanet and binary star system inclination angles under the mentorship of Dr. Andrew Vanderburg, University of Wisconsin.
- Conducted independent research on the relationship between dark matter and globular clusters

University of Texas Institute of Geophysics

Summer Intern

Austin, Texas
2019, 2020

- Analyzed radar grams of ice sheet data of Antarctic ice beds.
- Investigated an offset between radar and laser data over Devon Ice Cap, and presented the results at the fall conference of the American Geophysical Union.
- Currently investigating ways to differentiate between geological features on Mars using radar data.

St. Stephen's Python Camp

Counselor

Austin, Texas
Summer 2018

- Helped middle school students experiment with Python programming and the Google Voice API.

UCC Disaster Puerto Rico

Volunteer

Puerto Rico
Summer 2018

- Repaired roofs on houses damaged by Hurricane Maria.

Barton Hills and Silverado Assisted Living Facilities

Volunteer

Austin, Texas
2017–January 2020

- Performed monthly on the cello to senior residents in assisted living, both solo and with other performers.

PUBLICATIONS

- [1] **S. Christian**, “Re-examining the evidence of the Hercules–Corona Borealis Great Wall”, *Monthly Notices of the Royal Astronomical Society*, vol. 495, no. 4, pp. 4291–4296, May 2020, ISSN: 0035-8711. eprint: <https://academic.oup.com/mnras/article-pdf/495/4/4291/33372038/staa1448.pdf>.
- [2] **S. Christian**, M. Liu-Schiaffini, A. Rutishauser, K. Chan, C. Grima, and D. D. Blankenship, “Investigating Ice Surface Elevations Derived from Laser and Radar-sounding Measurements Over Devon Ice Cap, Canadian Arctic”, in *AGU Fall Meeting Abstracts*, vol. 2019, Dec. 2019, ED41B–1031.

EXTRACURRICULAR ACTIVITIES

- Student Council President Summer 2018–Current
Organized various school activities, such as school dances, class socials, and teacher appreciation activities. I created and currently manage the website for Student Council (lasastuco.org).
- Bowls of Hope Club, Cofounder 2018–Present
Organized various food drives and volunteer opportunities for club members. In total, I helped raise over 750 pounds of food and organize over 100 volunteer hours.
- LBJ/LASA High School Orchestra 2017–Present
Member of High School Orchestra
- Austin Youth Orchestra (Symphony) 2017–Present
Third chair my freshman and sophomore years, second chair my junior year in the top orchestra.
- LASA Science Olympiads Club 2017–Present
Top team all four years of high school. Participated in the Astronomy, Geologic Mapping, Circuit Lab, Herpetology, Fossils, Thermodynamics, Remote Sensing, and Machines events.
- Wikipedia Volunteer 2018–Present
Created over a dozen articles with over 5,000 edits. I also respond to emails sent to the Wikimedia Foundation, the nonprofit that runs Wikipedia.
- National Honor Society 2019–Present
Participated in volunteering opportunities provided by the organization to gain required number of hours per semester. Organized online elections in summer and fall 2020.
- JV Cross-Country Team 2017, 2018
A member of the LASA/LBJ Junior Varsity Cross Country Team.

SKILLS

- **Programming Languages:** Intermediate to advanced knowledge of Python, Stan, and Java. Some knowledge of SQL, Javascript and LaTeX
- **Astronomy topics:** Variable stars, exoplanets, bayesian inference, gamma-ray bursts, large-scale isotropy

LANGUAGES

- **Spanish:** Intermediate knowledge
- **National Spanish Exam:** Gold medal 2017, 2018, 2019

SCHOLARSHIPS AND AWARDS

- National Astronomy Olympiad semi-finalist 2019, 2020
- 1st place, Austin Regional Science Fair (State cancelled due to COVID-19) 2018
- State Science Olympiad Tournament (2nd in Remote Sensing, 1st in Astronomy) 2018
- MIT Science Olympiad Tournament (3rd in Geologic Mapping, 5th in Circuit Lab) 2019
- MIT Science Olympiad Tournament (6th in Astronomy) 2020
- UPenn Science Olympiad Tournament (2nd in Astronomy) 2020
- UIL State Solo and Ensemble “Outstanding Performer” (top 3% of soloists) 2019
- UIL State Solo and Ensemble I rating (highest rating), cello 2019
- UIL Region Solo and Ensemble I rating, piano 2019
- Texas All-State Orchestra (Sinfonietta orchestra) 2019
- Texas All-State Orchestra (Philharmonic orchestra) 2020
- All-Region Orchestra (2nd Chair) 2018
- All-Region Orchestra (1st Chair) 2019