

EDUCATION	Stony Brook University, Stony Brook NY <i>B.S. Physics and Astronomy</i> Graduation May 2020	Aug 2016 - Present	
	WISE (Women in Science and Engineering) Honor Society, Varsity Coxswain for Stony Brook Crew, Vice President of Outdoors Club. Member of the Association for Computing Machinery, Red Watch Band CARE Team, and American Geophysical Union.		
EXPERIENCE	Boulder Solar Alliance Research Experience for Undergraduates (REU) <i>NorthWest Research Associates, Boulder, CO</i> Advisors: Dr. Graham Barnes, Dr. KD Leka	May 19 - Present	
	10 week long, NSF-funded summer program in solar physics research. Computational project calculating the energies within individual current systems of solar active regions and comparing the values to the magnitude of flares produced. Project required use of IDL and Fortran languages. Project is continuing into the academic year.		
	Astrophysics Research Assistant, Flatiron Institute CCA <i>Flatiron Institute Center for Computational Astrophysics, New York City, NY</i> Advisor: Dr. Chiara Mingarelli	Jun 18 - Aug 18	
	Research project on gravitational waves. Estimated the probability of detection of two coalescing supermassive black holes in eccentric orbit. Attended weekly journal club at the American Museum of Natural History. Project required use of Python language.		
	Research Assistant, AERTC Labs <i>AERTC Labs, Stony Brook NY</i>	Jan 17 - April 17	
	Created and analyzed catalysts in auto emissions in Stony Brook’s AERTC lab. with additional research in Fourier-transform spectroscopy and LED characterization.		
SKILLS	LANGUAGES Python (Advanced), IDL (Intermediate), Fortran (Intermediate), C++(Beginners)	APPLICATIONS Latex, MatLab, Microsoft Office, Adobe Products (Ps, Id, Ai), ds9, IRAF, SExtractor	OTHER Teamwork, communication, adaptability, creativity, problem-solving
PRESENTATIONS & PUBLICATIONS	Isola, B., Barnes, G., Leka, K.D., Gilchrist, S. (2019, December) <i>The How and Why of Big Solar Flares</i> . Poster session presented at the annual American Geophysical Union (AGU) conference in San Francisco, CA.		
	Barnes, G., Cavins, A. S., Isola, B., Leka, K.D., Gilchrist, S. (2019, August) <i>Understanding the Where and the How Big of Solar Flares</i> . Poster session presented at the annual SHINE conference, Boulder, CO.		
HONORS & AWARDS	Fall Meeting General Student Travel Grant Grant sponsored by Lockheed Martin to cover expenses of travel for AGU 2019 conference, awarded by AGU.	Oct. 2019	

Conference Grant

Jul. 2019

NSF-funded travel grant for AGU 2019 awarded by Boulder Solar Alliance REU program.

Presidential Scholarship

Aug. 16 - May 20

Awarded by Stony Brook University. 4-year scholarship given awarded to High School seniors based on academic achievement, SAT/ACT scores, co-curricular activities, and research experiences.

OUTREACH**Observatory Asistant**

Oct 18 - Present

Avalon Park Sky Lab, Stony Brook, NY

Operating telescopes under professor Dave Barnett. Manual duties include setting up multiple telescopes, opening the observatory dome, and general observatory maintenance. Other duties include running outreach events to adults and children to educate them about the night sky. This includes explaining complex ideas while being accurate, engaging, and also coherent to audiences of various ages and backgrounds.