

Education & Employment

University of Hawai'i at Mānoa Institute for Astronomy <i>Ph.D. in Astronomy</i>	Honolulu, HI 2020 – Present
University of Hawai'i at Mānoa Institute for Astronomy <i>M.S. in Astronomy, 3.85/4.0</i>	Honolulu, HI 2018 – 2020
Bay Area Environmental Research Institute <i>Research Associate</i>	Moffet Field, CA Summer 2018
University of Washington <i>Bachelor of Science in Physics & Astronomy, 3.47/4.0 Astronomy 3.78/4.0</i> UW Dean's List – SP16, WI17, SP17 Astronomy Honors	Seattle, WA 2014 – 2018

Research

Interests: Solar & Stellar Physics – Solar Magnetic Fields – Stellar Evolution	
Constraining Angular Momentum Loss Mechanisms in Subgiant Stars <i>Dr. Jennifer van Saders & Dr. Jamie Tayar</i> ◦ Analyzing how different angular momentum loss models fare for stars on the subgiant branch.	Honolulu, HI Autumn 2019 - Present
Electric Current Neutralization in Solar Active Regions <i>Dr. Xudong Sun</i> ◦ Studying the relationship between current distribution and flare production in solar active regions.	Honolulu, HI Winter 2019 - Spring 2020
Lockheed Martin Solar and Astrophysics Lab <i>Dr. Sanjiv Tiwari & Dr. Bart de Pontieu</i> ◦ Studying the evolution of solar coronal plumes with the Interface Region Imaging Spectrograph (IRIS).	Palo Alto, CA Summer 2018
Solar Telescope <i>Astronomy Undergraduate Engineering Group</i> ◦ Developing a solar telescope for use in introductory astronomy courses.	Seattle, WA Autumn 2017 – Spring 2018
University of Alabama in Huntsville/NASA MSFC Heliophysics REU <i>Dr. Sanjiv Tiwari</i> ◦ Studying the magnetic origins of solar coronal plumes.	Huntsville, AL Summer 2017
Cataclysmic Variable Spectroscopy <i>Prof. Paula Szkody</i> ◦ Collected and reduced several Cataclysmic Variable (CV) targets and developed a CV catalog.	Seattle, WA Spring 2017 – Winter 2018
Little-Studied Open Clusters Project <i>Prof. Ana Larson</i> ◦ Cataloged open cluster properties and assisted in development of cluster membership analysis program.	Seattle, WA Spring 2016 – Winter 2017

Awards and Honors

American Astronomical Society Solar Physics Division Popular Writing Award:	May 2020
NSF Graduate Research Fellowship Program: Honorable Mention	April 2020
NSF Graduate Research Fellowship Program: Honorable Mention	April 2018
American Geophysical Union (AGU) Fall Meeting Outstanding Student Paper Award:	December 2017
UW Astronomy Baer Undergraduate Prize for Excellence in Research:	Spring 2017

Teaching

Astronomy Course Teaching Assistant: TA for UH undergraduate astronomy courses	Autumn 2018 - Spring 2019
Astronomy Course Grader: Grader for undergraduate astronomy core series	Autumn 2017 - Spring 2018
Introductory Physics Tutorial Instructor: Tutorial TA for UW introductory physics series	Winter 2017 – Spring 2018

Committees

UH Institute for Astronomy Graduate Admissions Committee: Graduate Student Representative	Spring 2019
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Volunteer Service and Outreach

Scientist: Skype a Scientist	Autumn 2019 - Present
Presenter: Stars Above Hawaii Stargazing Tours	Spring 2019 - Present
Author: Astrobites, astrobites.org/author/eavallone	Winter 2019 – Present
Volunteer: UH Institute for Astronomy Outreach	Autumn 2018 - Present

Pen-Pal: Letters to a Pre-Scientist
Secretary, President: UW League of Astronomers
Volunteer: Theodor Jacobsen Observatory
Presenter: UW Planetarium, UW Mobile Planetarium

Autumn 2018 – Present
Spring 2016 – Spring 2018
Spring 2016 – Spring 2018
Spring 2016 – Spring 2018

Mentorship

Maunakea Scholars Program: Graduate Student Mentor
Research Mentor: Co-advising high school student with Dr. Xudong Sun

Autumn 2018 – Present
Spring 2019 – Present

Technical Skills

Languages: Python | IDL | Mathematica | LaTeX | Bash | UNIX | R
Software: Wordpress | Microsoft Office
Telescope Operations: Observed 4+ nights at APO 3.5m, MRO 0.75m, DAO 1.83m

Workshops

Preparing for DKIST: Image processing and Time Series: Northridge, CA *Winter 2020*
Preparing for DKIST: An Introduction to Ground Based Data: Boulder, CO *Summer 2019*
UCAR CPAESS Heliophysics Summer School: Boulder, CO *Summer 2019*

Presentations

American Astronomical Society Winter Meeting: Poster *January 2020*
◦ Astrobites: Blogging Astronomy Research and Beyond
American Astronomical Society Winter Meeting: Poster *January 2020*
◦ Electric Current Neutralization in Solar Active Regions and its Relation to Magnetic Shear and Eruptive Activity
American Geophysical Union Fall Meeting: Poster *December 2019*
◦ Electric Current Neutralization in Solar Active Regions and its Relation to Magnetic Shear and Eruptive Activity
SHINE Conference: Poster *August 2019*
◦ Electric Current Neutralization in Solar Active Regions and its Relation to Magnetic Shear and Eruptive Activity
Lockheed Martin Solar and Astrophysics Lab: Seminar *July 2018*
◦ The Magnetic Origins and Spectroscopic Properties of Coronal Plumes
UW Undergraduate Research Symposium: Poster *May 2018*
◦ Adapting an Amateur Solar Telescope for use as a Lecture, Research, and Public Outreach Tool
Stanford University Solar Observatories Group: Seminar *March 2018*
◦ Critical Magnetic Field Strengths for Unipolar Solar Coronal Plumes in Quiet Regions and Coronal Holes?
American Geophysical Union Fall Meeting: Poster *December 2017*
◦ Critical Magnetic Field Strengths for Unipolar Solar Coronal Plumes in Quiet Regions and Coronal Holes?
UW Undergraduate Research Symposium: Poster *May 2017*
◦ MW Open Cluster Metallicities + Membership Assignment
Theodor Jacobsen Observatory: Public Outreach Talk | The Sun: Our Home Star *May 2017*
UW Planetarium: Universe Tours *Spring 2016 – Spring 2018*

Publications

Electric Current Neutralization in Solar Active Regions and Its Relation to Eruptive Activity: *2020*
◦ Ellis A. Avallone and Xudong Sun 2020, ApJ, 893, 123
Critical magnetic field strengths for unipolar solar coronal plumes in quiet regions and coronal holes?: *2018*
◦ Avallone, E. A., Tiwari, S. K., Panesar, N. K., Moore, R. L., Winebarger, A. 2018, ApJ, 861, 111

References available upon request.