

Spencer Riley (they/them)

Contact Information

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Development Experience

C, Flutter, HTML, IDL, JavaScript, Python, R, Shell,
Docker, Jupyter, Kubernetes,

Work History

Present	Graduate Research Assistant	[Montana State University]
01 Jun 2023	Currently working on developing analysis algorithms for high-resolution spectral observations by the Daniel K. Inouye Solar Telescope.	
01 Jun 2023	Graduate Teaching Assistant	
24 Aug 2022	Within the Physics Department, my responsibilities while in this position involved: <ul style="list-style-type: none">• Supervising and assisting in undergraduate physics laboratory classes.• Assisting instructors with grading assignments.• Tutoring physics students	
29 Jul 2022	Post-Bachelor's Researcher	[Institute of Complex Additive Systems Analysis]
22 May 2022		
22 May 2022	Research Intern	
05 Sep 2017	During my time in these positions, my contributions to projects I have worked on include: <ul style="list-style-type: none">• Data preprocessing for language detection models• Developing analytical methods for RF and Bluetooth models• Internet-Of-things research and metadata configuration• Writing Helm Charts for several Kubernetes applications The last project I worked on applied acoustic analysis as a method to detect aircraft.	
16 Aug 2017	High School Work Study	[National Security Agency]
06 Sep 2016	As a requirement of this position, I had to pass a background check and a federal investigation to obtain a Top Secret security clearance. The tasks I was assigned involved clerical work relating to inventory, data transfer requests, and documentation management. In addition, I was a part of the effort to prepare for the Inspector General's inspection.	

Education

Present	Ph.D. Physics	[Montana State University]
Aug 2022		GPA: 3.10
May 2022	B.Sc. Physics	[New Mexico Institute of Mining and Technology]
Aug 2017	Astrophysics and Atmospheric Physics Option Minor in Mathematics	
		GPA: 3.28

Publications

- 18 Mar 2022 **Atmospheric precipitable water vapor and its correlation with clear-sky infrared temperature observations**
Vicki Kelsey, Spencer Riley, Kenneth Minschwaner
Atmospheric Measurement Techniques
10.5194/amt-15-1563-2022

Presentations

- Jul 2024
Bozeman, MT **Identification of chromospheric dynamical signatures in solar flares with DKIST**
Hinode-17/IRIS-15/Sphere-3 Meeting
- Apr 2022
Lubbock, TX **The Precipitable-Water Model Analysis Tool: An open-source suite for estimating precipitable water with low-cost instrumentation.**
National Weather Service, 5th Texas Weather Conference
- Apr 2022
Lubbock, TX **Atmospheric Precipitable Water and its Correlation with Clear Sky Infrared Temperature Observations**
National Weather Service, 5th Texas Weather Conference
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- Jan 2020
Boston, MA **Atmospheric Precipitable Water and its Correlation with Clear Sky Infrared Temperature Readings**
American Meteorological Society Annual Meeting 100
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- Nov 2019
Providence, RI **Atmospheric Precipitable Water and its Correlation with Clear Sky Infrared Temperature Readings: Data Analysis**
Physics Congress 2019