Loren J. Robinson

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Education

2023 – Present **University of Wisconsin-Madison**, Madison, WI.
PhD in Astronomy, expected in 2028.
MSc in Astronomy, conferred August 2025.
Advisor: Dr. Catherine Grier.

2019 – 2023 **The Ohio State University**, Columbus, OH.
Bachelor of Science in Physics, Astronomy, and Astrophysics, May 2023.

Research Positions

2023 – Present **University of Wisconsin-Madison**, Madison, WI.
Graduate research assistant studying broad absorption line variability and developing reverberation mapping lags for SDSS quasars in the sdss-rm field.

2022 **University of Hawai'i**, Honolulu, HI.
Research Experience for Undergraduates (REU) Summer Researcher in Extragalactic Astronomy.

2021-2022 **Ohio State University**, Columbus, OH.
Assisting the ATLAS group at Ohio State University with analysis of optical shifts during VCSEL (vertical-cavity surface-emitting laser) production.

Publications

L. Robinson et al. *The Connection Between PAH and MIR Emission Features and Physical Processes in Ultra Luminous Infrared Galaxies.* ApJ, **999** 25. arXiv:2601.09810 (2026).

D. Farrah et al. *How accurately can obscured galaxy luminosities be measured using spectral energy distribution fitting of near- through far-infrared observations?* ApJ, **997** 150. arXiv:2511.13849 (2026).

L. Robinson et al. *The SDSS-V Black Hole Mapper Reverberation Mapping Project: Investigating Coordinated Variability in BAL Quasars.* In Prep.

Awards and Scholarships

2026 Blair Savage Astronomy Travel Fund Recipient

2025 Wisconsin Space Grant Consortium Graduate & Professional Research Fellowship

2023 L. Earl Slusher Scholarship

2023 Finalist in Seventh Annual American Statistical Association DataFest Competition

2021 Second-Year Transformational Experience Program Fellowship Recipient (OSU)

2020 Helen Cowan Book Award winner

2019 – 2023 8x Ohio State University Dean's List

2019 – 2023	Provost Scholarship
2019 – 2023	Jillian Schrader-Towne Memorial Math Scholarship

Recent Conferences and Workshops

March 2026	Language AI in the Space Sciences (Baltimore, Maryland)
Jan. 2026	SDSS-V Black Hole Mapper Meeting (Remote) – poster and invited talk
Dec. 2025	Highly accreting supermassive black holes across all cosmic times: from the Local Universe to Cosmic Dawn (Remote) – poster
Aug. 2025	Code/Astro Workshop (Evanston, Illinois)
June 2025	246th American Astronomical Society Meeting (Anchorage, Alaska) – talk given
June 2024	AAS Software Carpentry Workshop (Madison, Wisconsin)
June 2024	244th American Astronomical Society Meeting (Madison, Wisconsin) – poster
Jan. 2023	241st American Astronomical Society Meeting (Seattle, Washington) – poster
Nov. 2022	Ohio State Second-Year Transformational Experience Program Expo (Columbus, Ohio) – poster
July 2022	University of Hawaii Summer Undergraduate Research Experience Symposium (Honolulu, Hawai'i) – poster
July 2022	University of Hawaii Research Experience for Undergraduates Symposium (Honolulu, Hawai'i) – poster

Technical Skills

Programming

Data Analysis, Machine Learning, Python (Pandas, Numpy, Scipy, Scikit-learn & more), SQL, HTML, GitHub/git, Linux, Bash, LaTeX, C++, Mathematica

Languages

English (native speaker), American Sign Language (elementary proficiency)

Systems

The University of Utah Center for High Performance Computing (CHPC), Ohio Supercomputer Center (OSC), CERN's LXPLUS

Teaching Experience

2025 – Present **Teaching Assistant – University of Wisconsin-Madison**
Astronomy 140 – Earth 2.0: Exoplanet Revolution
Astronomy 103 – The Evolving Universe: Stars, Galaxies, & Cosmology

2024 – Present **Grader – University of Wisconsin-Madison**
Astronomy 200 – The Physical Universe
Astronomy 103 – The Evolving Universe: Stars, Galaxies, & Cosmology

2022 – 2023 **Instructional Assistant – The Ohio State University**

Astronomy 1101 – From Planets to the Cosmos

Astronomy 1221 – Astronomy Data Analysis

Relevant Coursework

Fall 2024 **Data Science Programming II**

- Use basic machine learning techniques, including regression, classification, clustering, and decomposition.

Fall 2023 **Introduction to Artificial Intelligence**

- Applied the foundational tools in Machine Learning and Artificial Intelligence. Understand core techniques in Natural Language Processing.
- Consider how Artificial Intelligence and Machine Learning problems are applied in Real - World settings and the Ethics of Artificial Intelligence.

Fall 2022 **Big Data Analytics**

- Introduction to machine learning and advanced algorithms, with an emphasis on practical physics-based applications.

Service

University Service

2025 – Present **Undergraduate Research Mentor**

Research mentor to an undergraduate student at UW-Madison.

2025 – Present **Graduate Student Peer Mentor**

Peer mentor to an incoming first-year graduate student in astronomy.

Broader Service

2026 **Code/Astro Teaching Assistant**

Teach fundamental software engineering skills and best practices for building sustainable open-source packages for astronomy applications.

Public Engagement

2025 – Present **Universe in the Park – Presenter**

Travel to Wisconsin state parks to deliver presentations to the public. Set up a telescope and provide park visitors with the opportunity to view available astronomical objects.

2025 – Present **Washburn Observatory – Host**

Open and run the observatory for public observing nights.