

Maia Willis-Reddick

Geology Undergraduate

mwillisreddick@arizona.edu

Oneonta, New York

Education

Bachelor of Science in Geosciences with emphasis in Geology, minor in Planetary Science.

Graduation expected Summer 2025

- A.W. Vorhees, George H. Davis, Paul E. Damon, and Department of Geosciences scholarships for academic achievement and research achievement, Fall 2021
- Honorable Mention for Spring 2021 and 2022 semesters, Dean's List Half Time for Spring 2024 semester.

Experience

Undergraduate Researcher, University of Arizona Lunar and Planetary Laboratory

June 2021 to Present

- Researching of circumpolar deposits of the north pole of Mars using orbital SHARAD Radar
- Mapping of approximately 2000 radargrams to pinpoint icy deposits in specified regions, in conjunction with surface dune mapping using THEMIS/MOLA imagery
- Interpretation and digital processing of Radar information to extract geophysical properties using Python
- Mastery of radar analysis using Seisware software, and advanced knowledge of surface geological mapping from orbital imagery using ArcMap
- Participation in the Arizona Space Grant internship program during the 2022 academic year
- Academic paper for Journal of Geophysical Research currently in production.

Student Worker, Arizona Geological Survey

January 2024 to October 2024

- Primary project includes the photography of more than 500 core boxes of economically important mineral deposits held by the AZGS, involving the archiving, stratigraphic rearrangement, and maintenance of core library
- Individual sample tagging and organizing as auxiliary roles.

Mentor, Project POEM, University of Arizona

Spring 2022 semester

- Student mentor to visually impaired youth using 3D models of celestial objects and features
 - Primary roles included mentoring, teaching, coordination, and science outreach
 - Assisted during weeklong excursion of mentees to the University, including safeguarding and transportation duties
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References

Stefano Nerozzi, current supervisor at LPL nerozzi@arizona.edu

Jack Holt, current supervisor at LPL, Earth Dynamics Observatory director jwholt@arizona.edu

Nathan Carey, former supervisor at the AZGS ncarey@arizona.edu