

CORE COMPETENCIES

- Data integration, critical thinking, and data-driven creative problem solving
- Data analysis, statistical modeling, and machine learning (regression, classification, clustering, PCA, etc.)
- Data pipelines, acquisition, curation, and management
- Data visualization for diverse audiences (matplotlib, Photoshop, Illustrator, etc.)
- Programming in Python (numpy, pandas, scipy, scikit-learn, etc.), R, IDL, MatLab
- Project management and leadership
- Satellite and remote sensing image processing and analysis (e.g., EO, photogrammetry, hyperspectral, multispectral, panchromatic, SWIR, MWIR/TIR, ground truthing remotely sensed data, etc.)
- GIS principles and software (e.g., ENVI, ESRI-ArcPro/GIS, Agisoft, GDAL, etc.)
- Field geology and land surveying (stratigraphy, sedimentology, UAV, etc.)
- Numerical Modeling

WORK EXPERIENCE

Remote Sensing Scientist, Doctoral Fellow, Teaching Assistant, University of Arkansas 2020 - present

- First authored studies on the relationships between Earth's deltas and those found on Mars
- Innovated new analytical and geospatial methods for studying rivers on Earth and Mars
- Host of international seminar on Earth analogs for martian rivers
- Presented at 10+ international conferences to audiences of varying technical backgrounds
- Taught four semesters of introductory geology courses; multiple students went on to research positions
- Proactively led, trained, and mentored research assistants in advanced remote sensing techniques, data analysis, and visual communication for diverse audiences

Graduate Researcher & Teaching Assistant, Western Washington University 2018 - 2020

- First authored a study on the likelihood of life being preserved in a lake on Mars
- Co-led selection and mapping effort for NASA's Perseverance Rover Landing site, Jezero crater, Mars
- Collaborated on three projects using NASA Orbiter/Rover data from Mars as a NASA Student Scientist
- Taught six quarters of introductory geology courses; multiple students went on to research positions

Undergraduate & Post-Baccalaureate Researcher, University of Texas at Austin 2014 - 2018

- First authored a study on landforms consistent with a northern ocean on ancient Mars

EDUCATION

Ph.D., Geology *expected* - 2025
University of Arkansas

M.Sc., Geology 2020
Western Washington University

B.Sc., Geosciences 2017
The University of Texas at Austin, Jackson School of Geosciences

PUBLICATIONS -- [H-Index = 7; I10-Index = 7; Citations = 368]

- Lead author on two peer-reviewed publications; one more submitted; another in preparation
- Collaborated on international and interdisciplinary teams to co-author nine peer-reviewed publications and 15+ conference presentations
- A list of my publications can be found on my [Google Scholar page](#)

HONORS & REWARDS

U of A Doctoral Academy Fellowship 2020 - 2024
Recipient of multiple scholarships including commendations for mentorship and DEI 2016 - 2024