
Education

University of Wyoming , Laramie, WY	GPA: 4.0/4.0
M.S. Geology	May 2023
Thesis: Deep seawater incursion and high-temperature amphibole growth along cross-cutting detachment faults at the Southwest Indian Ridge	
<ul style="list-style-type: none"> Analyzed rock microstructures, mineral chemistry, and seafloor topography to model how faults facilitate seawater circulation and rock deformation below the seafloor in the Indian Ocean 	
University of North Carolina at Chapel Hill , Chapel Hill, NC	GPA: 3.7/4.0
B.S. Geological Sciences, Distinction and Highest Honors	May 2019
Thesis: 3D-Modeling and Magnetic (AMS) Analysis of Mesozoic Diabase Dikes in North Carolina	
<ul style="list-style-type: none"> Constructed 3D models of excavated dike exposures from photogrammetric surveys and analyzed anisotropy of magnetic susceptibility in rock samples to model the magma paleo-flow direction 	
University of St Andrews , St Andrews, UK: <i>Geology Field Camp in Scotland</i>	Summer 2018

Work Experience

Graduate Teaching Assistant, UW, Laramie, WY	Fall 2019 & 2022; Spring 2023
<ul style="list-style-type: none"> Taught 24 upper-class students geological mapping, scientific writing, and Structural Geology Lab 	
Contract Geologist, Wyoming State Geological Survey, Laramie, WY	June 2021–June 2022
<ul style="list-style-type: none"> Co-led digital field mapping using StraboSpot and ArcGIS Pro, and analyzed new geochemical and geochronological data to publish the Geological Map Series of the Phantom Lake Quadrangle, WY 	
Geologist GS-1350-05, United States Geological Survey (USGS), Menlo Park, CA	Summer 2019
<i>National Association of Geoscience Teachers – USGS Cooperative Summer Field Training Program</i>	
<ul style="list-style-type: none"> Conducted geophysical surveys using Scintrex CG5 gravimeters and Geometrics magnetometers Developed joint gravity and magnetic models with Geosoft Oasis Montaj software to interpret structural settings in the Great Basin and Geysers Geothermal Field 	
Research Assistant, Dr. Allen F. Glazner, UNC, Chapel Hill, NC	Apr. 2017–May 2019
Manager of NCDOT Pea Island National Wildlife Refuge Shoreline Monitoring Project	
<ul style="list-style-type: none"> Characterized composition of heavy sand minerals using a scanning electron microscope (SEM) Trained new lab assistants to use lab equipment and managed standard operating procedures 	

Technical Skills

Mapmaking, georectification, geoprocessing, and geodatabase management in **ESRI ArcGIS Pro, QGIS, and R**
 Drone imaging and 3D-modeling with ground control points in **Pix4D** and **ESRI ArcScene** software
 Scientific programming and data analysis using **Python** and **R**
 Microstructural (electron backscatter diffraction) and chemical analysis of rock samples using an **SEM**

Professional Associations

Geological Society of America	Sept. 2018–Present
Association of Environmental & Engineering Geologists	Apr. 2018–Present

Achievements & Awards

GSA Graduate Student Research Grant (\$1500) and Outstanding Student Award (\$500)	May 2020
Wyoming NASA Space Grant Graduate Research Fellowship (\$20,000 + tuition & fees)	April 2020
Daniel Craig Pignatiello Fund for Undergraduate Research in Geological Sciences (\$4,116)	April 2018
Achieved the rank of Eagle Scout, BSA Troop 444	July 2012

Community Activities

Binghamton University Masters Swimming	2023–Present
University of Wyoming Club Swimming, Founder and President (2019–2021)	Active Member 2019–2023