

Education

| | |
|---|---------------------------|
| University of Wyoming , Laramie, WY | GPA: 4.0/4.0 |
| M.S. Geology | Expected Dec. 2021 |
| Thesis: <i>Understanding the tectonics and deformation at ultra-slow spreading mid-ocean ridges</i> | |
| · Conducting microstructural analyses and interpreting seafloor topography to model how faults incrementally transport mantle rock from >20 km depth to the surface 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: <i>3D-Modeling and Magnetic (AMS) Analysis of Mesozoic Diabase Dikes in North Carolina</i> | |
| · Constructed 3D models from aerial drone surveys of excavated dike exposures and used anisotropy of magnetic susceptibility analysis to determine magma flow direction in the dikes | |
| University of St Andrews , St Andrews, UK: <i>Geology Field Camp in Scotland</i> | Summer 2018 |

Work Experience

| | |
|---|-------------------------------|
| Graduate Teaching Assistant, UW, Laramie, WY | Sept. 2019 – Dec. 2019 |
| · Developed and presented weekly lectures to 24 upperclassmen students for Structural Geology Lab | |
| Geologist, United States Geological Survey (USGS), Menlo Park, CA | Summer 2019 |
| <i>National Association of Geoscience Teachers (NAGT) – USGS Cooperative Summer Field Training Program</i> | |
| · Conducted geophysical surveys using Scintrex CG5 gravimeters, Geometrics magnetometers, and Trimble GEOXH GPS | |
| · 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 | |
| · Analyzed composition of heavy sand minerals using energy dispersive x-ray spectroscopy (EDS) on a scanning electron microscope (SEM) | |
| · Trained new lab assistants to use lab equipment and managed project procedure | |

Technical Skills

Data analysis, proposal & report writing, and presentations using **MS Excel, Word, and PowerPoint**
Mapmaking, georectification, geoprocessing, and vector & raster analyses 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 (EDS) 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 Presentation Travel Award (\$500) | May 2020 |
| Wyoming NASA Space Grant Graduate Research Fellowship (\$20,000 + tuition & fees) | April 2020 |
| Walter H. Wheeler Teaching Fellowship and Award Fund (\$1,000) | April 2018 |
| Daniel Craig Pignatiello Fund for Undergraduate Research in Geological Sciences (\$4,116) | April 2018 |
| Achieved the rank of Eagle Scout , <i>BSA Troop 444</i> | July 2012 |

Community Activities

| | |
|---|---------------------|
| President and Founder of University of Wyoming Club Swimming | Fall 2019 – Present |
| UNC Geology Club, UNC Club Swimming, and UNC Esports Club | 2016 – 2019 |