

Taylor Barnhart

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OBJECTIVE

A master's student pursuing internship and full-time opportunities in state government or private entities involved with water resources, geological sciences, and environmental causes starting May 2021.

SKILLS

Computer Skills: Proficient in ArcGIS (Desktop, Pro, Online, and Collector), MATLAB, Microsoft Office Suite (Word, Excel, PowerPoint, Access, and Teams), Google Workspace, WordPress, and Social Media. Familiar with Adobe Creative Suite (Photoshop, InDesign, and Illustrator). Exposed to R and Python.

Soft Skills: Adaptability, data management, project management, cross-cultural communication, scientific research, report writing, interpersonal skills, teamwork, field work, time management, and public speaking.

Languages: Basic Spanish and intermediate Swahili.

EDUCATION

The University of Texas at Austin, Jackson School of Geosciences, Austin, TX May 2021
Master of Science in Energy and Earth Resources | GPA: 3.83

- Concentration: hydrology and water Resources.
- Thesis: *Constraining Data Requirements and Acquisition Costs for Underground Injection Control Class VI Carbon Dioxide Injection Permits* supervised by Dr. Susan Hovorka.
- Relevant Coursework: physical hydrology, water resources planning and management, environmental impact assessment, GIS and GPS applications in earth science, and water law.
- Member of the Energy Resources Group and Longhorn Energy Club

The University of Oregon, Department of Earth Sciences, Eugene, OR June 2017
Bachelor of Science in Geological Sciences | GPA: 3.63

- Minors: economics and environmental studies.
- Thesis: *The Issue of Scaling Effect When Determining Porosity and Permeability In Volcanic Pyroclasts* supervised by Dr. Thomas Giachetti.
- Relevant Coursework: hydrogeology, earth physics, structural geology, sedimentology and stratigraphy, and geology field camp coursework during the summer of 2016.
- Member of the American Association of Petroleum Geologists student chapter, International Business and Economics Club, Geology Club, and the Phi Delta Theta Fraternity.

Uppsala University Exchange Program, Uppsala, Sweden January 2016 – June 2016

- Relevant Coursework: structural geology and ground stability, regional geology, and a geological mapping project in Åre, Sweden.

EXPERIENCE

Bureau of Economic Geology, Gulf Coast Carbon Center, Austin, TX September 2019 – Present
Graduate Research Assistant

- Gathering and analyzing data for potential carbon dioxide storage sites within the United States and internationally with the research scientists of the Gulf Coast Carbon Center.
- Digitizing maps in ArcGIS for use in reports and/or publication online.
- Assisting in research and report writing for various carbon sequestration projects with a focus on groundwater resource implications of carbon sequestration.

West Gulf River Forecast Center, Fort Worth, TX
Hydrologist Pathways Intern

May 2020 – August 2020

- Created five flood inundation maps for Texas using the flood extent simulation model (FESM), FEMA Flood Insurance Study (FIS) cross sections, and ArcGIS.
- Expediated flood inundation map creation through the use of ModelBuilder in ArcGIS.
- Developed ArcGIS Online Web Apps and Dashboards for displaying completed flood extent maps.
- Designed graphics educating the public on various meteorological and hydrological issues for release on the West Gulf River Forecast Center web page, Twitter, and Facebook.
- Completed over 40 hours of training on topics, including, the Community Hydrologic Prediction System (CHPS), Quantitative Precipitation Forecast (QPF), National Water Model, Dams and Dam Failure, Flash Flood Hydrology, Hydraulics, HEC-RAS, and Tropical Meteorology.

Peace Corps, Pemba, Tanzania
Secondary Education Science Teacher

July 2017 – July 2019

- Taught physics, English, and basic computer courses at a school with upwards of 1,200 students.
- Assisted fellow volunteers in implementing water projects as the Water Specialist for the Food Security, Empowerment, Assistance, and Sustainability in Tanzania committee (FEAST).
- Coordinated and led an after school physics experiment club and an English club for students and community members.
- Co-lead a young men's group (Kibigilini Men's Club) that promoted exercise, nutrition, health, education, and the prevention of gender-based violence.

Nearby Nature, Eugene, OR
Restoration Intern

September 2016 – May 2017

- Organized and coordinated restoration work parties, while promoting volunteerism and environmental awareness at Alton Baker Park through outreach and demonstrations of restoration techniques.
- Controlled invasive species and ensured native plant growth, through plant identification, maintenance, and restoration tools.
- Acquired knowledge of soil science, ecology, natural history, and water quality to better aid in the effectiveness of restoration work.

University of Oregon, Knight Library, Eugene, OR
Aerial Photography and GIS Research Assistant

March 2015 – May 2017

- Assisted patrons in locating and understanding maps and aerial photographs within the collection.
- Demonstrated the use of and process of requesting aerial photography to students, and assisted in the training of new student assistants.
- Located, edited, and digitized some of the 600,000 photographs in the collection through the use of ArcGIS and Photoshop.

HONORS AND AWARDS

- Energy and Earth Resources Graduate Program Fellowship Fall 2019 – Spring 2021
- USGS/NAGT Cooperative Field Training Program Nominee Summer 2017
- Northwest Energy Association AAPGY Student Chapter Scholarship Summer 2017
- ExxonMobil NW Short Course on Reservoir Characterization Fall 2016
- Pacific Section AAPG Scholarship Summer 2016
- Benjamin A. Gilman International Scholarship Spring 2016