Estefani Ruiz Toro

Houston, TX 77002
estefaniruiztoro@gmail.com | (832) 998-2504 | www.linkedin.com/in/estefaniruizt

EDUCATION

University of Houston *Expected Graduation: May 2026*
Master of Science in Geology
- Relevant Coursework: Basin Analysis for Petroleum Exploration, Seismic Structural Geology.
- Research Focus: Northern Pacific and Alaska-Russia subduction-collision margins and the origin of the Bering Sea
- Advisor: Dr. Paul Mann

University of Houston-Downtown *Graduation: May 2024*
Bachelor of Science in Geosciences, Summa Cum Laude
- Research Project: Utilizing ArcGIS and LiDAR Data to Map Geomorphic Features of the Ragged Mountain Fault in Katalla, Alaska
- Relevant Coursework: Petroleum Geology, Basin Analysis, Field Geology, Remote Sensing, Python.

PROFESSIONAL EXPERIENCE

NASA - National Aeronautics and Space Administration **June 2024 – August 2024**
Heliophysics Research Program Analyst Intern, Headquarters, Washington DC.
- Developed Python scripts to process and analyze extensive heliophysics datasets, enhancing the accuracy and efficiency.
- Organized and segmented large volumes of data into annual Excel books, facilitating examination of research regimes and funding allocations.

PLS- Bowden Land Surveying **June 2022 – February 2024**
Administrator, Legal Replatting Services, Houston, TX.
- Interacting with clients and collaborating with team members, developing my communication skills.
- Responsible for project legal work, I ensure that deadlines are met and that all necessary preparations are made.
- Managed approximately 40 projects, I gained valuable experience maintaining high quality and thoroughness of projects, clients, and the company's final product.

Mathematics, Science, and English Academic Tutor, **January 2020 – February 2022**
Administrator, Legal Replatting Services, Houston, TX.
- Teaching and reviewing assignments and topics. Assisting ~ 25 students. 97% passing rate among students.
- Each student was different and, in some cases, had special needs that taught me personal communication skills, to be patient, and to understandeach person.

RESEARCH EXPERIENCE

Graduate Research Assistant **June 2024 – Present**
University of Houston, Department of Earth and Atmospheric Sciences
- Initiated research on the crustal structure of the Bering Sea , focusing on seismic, tomographic, and gravity magnetic data to evaluate hypotheses of oceanic crust formation.
- Collaborating on a mega-regional tectonic study integrating multidisciplinary data across international boundaries to clarify the tectonic history and origins of the northern Pacific and Alaska-Russia subduction-collision margins.

Undergraduate Researcher **August 2023 – May 2024**
University of Houston-Downtown, Department of Natural Sciences, Geoscience
Project: Utilizing ArcGIS and LiDAR Data to Map Geomorphic Features of the Ragged Mountain Fault in Katalla, Alaska
- Utilized high-resolution LiDAR data enhanced by 3D terrain models in ArcGIS Maps to study the geomorphic features and kinematics of the Ragged Mountain Fault in Katalla, Alaska. Mapped geomorphic features using LiDAR, providing detailed topographic profiling that revealed significant geomorphic disturbances indicative of active tectonics.
- Created ArcGIS-enhanced DEMs to visualize and analyze geomorphology, offering insights into the fault's activity and evolution.
- Supported the hypothesis of hanging-wall extension over a buried thrust ramp, aligning with the thrust fault model proposed for this fault.

AWARDS/SCHOLARSHIPS

- Scholar's Academy at the University of Houston- Downtown
- NASA/Texas Space Grant Consortium Scholar
- Diversity Scholarship Award from Association of Environmental Engineering Geologists

VOLUNTEERING/MEMBERSHIPS

- Member of the Association of Environmental & Engineering Geologists
- Member of American Association of Petroleum Geologists
- Member of Society of Sedimentary Geologists
- Volunteer for Houston Geological Society

SKILLS

Software: Python, AutoCAD, ArcGIS Map, ArcGIS Pro, ArcGIS Online
Certifications: ArcGIS Pro, ArcGIS Online
Languages: English (Bilingual), Spanish (Bilingual), and French (Professional Proficiency).

*References available upon request.