

Master and PhD Positions in Earth and Environmental Sciences

The University of Texas at El Paso

Principal Investigator ([Lab Website](#))

Haitao Shang, Assistant Professor

Department of Earth, Environmental and Resource Sciences & Computational Science Program

The University of Texas at El Paso (UTEP)

Position

We are seeking multiple highly motivated Master's and PhD students to join our lab, which focuses on a broad spectrum of Earth and environmental sciences. Our primary interest lies in studying Earth-life systems across various temporal and spatial scales. Students can join our lab through either the [Geoscience Program](#) or the [Computational Science Program](#). Prospective Master's and PhD students will engage in interdisciplinary research utilizing a combination of mechanistic theoretical models (based on fundamental physics), high-dimensional mathematical models (with numerical simulations), machine learning methods and big data analyses, computational biology and bioinformatics as well as laboratory experiments and field observations. The research in our lab is driven by the overarching goal of answering fundamental questions about the microscopic/macroscale interactions, dynamical properties, and evolutionary processes of Earth-life systems as well as identifying basic rules governing Earth's sustainability and exoplanets' habitability. The main responsibility of graduate students is to conduct scientific research and publish in high-quality academic journals. These positions offer generous benefits packages, including contributions to tuition and health insurance, by UTEP policies.

Qualification

A Bachelor's or Master's degree in one of the following disciplines or a closely related field:

Geology, Geochemistry, Geobiology, Climate Science, Marine Science, Ecology;

Mathematics, Applied mathematics, Physics, Applied Physics, Statistics;

Data science, Computer science, Computational Mathematics, Computational Biology, Bioinformatics;

Biological Science, Microbiology, Environmental Science, Chemistry, Civil Engineering.

Note: Research experience in the above subjects is preferred but not required.

Application (Two Steps)

1. Interested candidates are kindly requested to send the following materials to Dr. Haitao Shang via hshang@utep.edu with the subject of "Graduate Position Application -- Applicant's Name":

1. A detailed CV/Resume (including a full publication list if applicable).
2. A copy of undergraduate and/or graduate transcripts.
3. Contact information of 3 potential referees.
4. The TOEFL (≥ 79) or IELTS (≥ 6.5) score is required by the university for an international student whose native language is not English.
5. The requirement for GRE score depends on the specific program through which a student chooses to join our lab. The GRE score is required for the [Computational Science Program](#), whereas the [Geoscience Program](#) does not require it.

Please consult the [UTEP Graduate School website](#) for detailed information.

2. Submit formal applications through the [UTEP Graduate School Application System](#).