Multiple Graduate Student Assistantships in Hydrology and Fluvial Geomorphology at The University of Texas at El Paso (UTEP)

The Department of Geological Sciences at the University of Texas El Paso (UTEP), invites applications for multiple graduate-level (MS or PhD) research assistantships on the broad areas of hydrology and fluvial geomorphology observations and modeling. We seek dedicated and motivated students holding Bachelors or Masters of Science degrees in earth science, engineering, geology, geography, computer science, data analytics or a related physical science field to work with Prof. Laura Alvarez (alvarez@utep.edu) or Prof. Hernan Moreno (moreno@utep.edu) within the following research focuses:

Fluvial Geomorphology: Potential students interested in river systems, numerical modeling and robotics will be supervised by Prof. Alvarez and engaged in one or several of the following research projects: 1) Development, testing, improvement and application of distributed, parallelized, physically-based modeling of flow, sediment and bed evolution at the scale of a large river reach and at the scale of a laboratory flume. 2) Use of autonomous systems (unmanned aerial systems and autonomous boats) for innovations in process-based robot learning complemented with real-time adaptive sampling for path planning and surveillance of hydrosystems.

Hydrology: Prospective students will emphasize the study of hydrosystems under natural variability and anthropogenic change that face new challenges for society's water security and extreme events forecasting through the use of remotely sensed information from satellites, radars and unmanned systems, distributed hydrological modeling and machine learning to develop platforms for decision making under uncertainty. Ability to participate in field trips and knowledge and experience in Unix/Linux environment is highly desirable as well as programming skills. More information about Dr. Moreno's research portfolio and teamwork can be found at http://moreno.oucreate.com/.

Review of applications will start immediately, and successful applicants may start as early as Fall 2020 but no later than Spring 2021. Applications will be reviewed on a rolling basis until suitable candidates are found. Interested candidates should email their CV and unofficial transcripts to both Prof. Laura V. Alvarez (alvarez@utep.edu) and Prof. Hernan A. Moreno (moreno@utep.edu).

The Department of Geological Sciences at University of Texax at El Paso is a vibrant group of 25 faculty representing a wide variety of geology, geophysics, hydrology, environmental science, and geography expertise. The degrees the Department offers include the B.S., B.A., and M.S. in Geological Sciences, the B.S. and M.S. in Environmental Science, the B.S. and M.S. in Geophysics, and a minor in Geography. Our Ph.D. in Geological Sciences includes students with interests in any of these subdisciplines. We also support student training in cross-campus interdisciplinary Ph.D. programs including the Environmental Science and Engineering, Computational Science, and Data Science Ph.D. programs. The University of Texas at El Paso is a national and international research university committed to access and excellence. UTEP enrolls over 25,000 students UTEP is designated by the Carnegie Foundation as an R1 university and is recognized as "Community Engaged."