

Position Title: Ph.D. Position in Water Resources Engineering (U.S. Citizens and underrepresented minority students)

Start date: Fall 2020

Description: A Ph.D. research assistant position is available at the iWERS group (ce.sc.edu/iWERS) of University of South Carolina with the focus on using emerging artificial intelligence and systems engineering methods to improve knowledge of water resource modeling and management. The candidates must be U.S. Citizen and underrepresented minority students in the fields of science, technology, engineering, and mathematics (STEM).

The primary goal of the iWERS group is to develop innovative techniques to improve informed management of integrated water and environmental resources using systems and artificial intelligence approaches. We explore alternatives beyond utilization of existing structures and the physical limits of water resources systems to include technical, social, political, and economic aspects for better resource management. We build complex quantitative and computational models with the purpose of providing enhanced knowledge needed to better understand interactions in coupled human-natural systems and water-energy-food nexus, and how they are shaped by external forces.

This position is part of the National Science Foundation (NSF) BRDIGE to Doctorate program. The fellowship provides tuition support and salary depends on the students' background and level of experience.

The University of South Carolina System is comprised of the state's flagship university in Columbia (founded in 1801 and currently one of the top 50 "Best Colleges" according to U.S. News and World Report).

Minimum Requirements

- MSc or ME in civil and environmental engineering, computer science, or related field with GPA higher than 3.5.
- Computational proficiency (coding in one of MATLAB, Python, R, JAVA, or C++)
- Strong research background in AI, such as data mining, machine learning, deep learning, and image segmentation
- Experience in developing and running simulation and optimization models
- Strong communication skills, both written and oral

Preferred Skills and Experience

- Experience in authoring/co-authoring scientific publications
- Experience presenting scientific findings at conferences
- A solid interdisciplinary academic and leadership skill records

How to apply

Interested candidates should send their current C.V., transcripts, and GRE scores via email to Dr. Erfan Goharian at goharian@cec.sc.edu.