

Position Description

Department of Industrial Engineering (IE) and Department of Engineering Technology (ET) at the University of Houston (UH) invite qualified candidates for **one postdoctoral** (postdoc) research associate position and **two doctoral research assistant** (RA) positions, with research focus on system modeling and simulation, starting as early as spring 2024. The postdoc position will be supervised by Dr. Weihang Zhu (ET, <https://coss.egr.uh.edu/>) and Dr. Suresh Khator (IE, <https://www.ie.uh.edu/faculty/khator>). One doctoral RA will be supervised by Dr. Ying Lin (IE, <https://www.ie.uh.edu/faculty/lin>). The other doctoral RA will be supervised by Dr. Khator and Dr. Zhu.

The postdoc appointment is for a minimum of one year and up to three years. The postdoc will be responsible for: 1) developing course and curriculum in system modeling, simulation, and data science; 2) conducting research and taking leadership in writing proposals and research papers; 3) developing collaboration with other research teams, public agencies, and industry partners; 4) co-supervising student projects and basic administrative support; and 5) co-supervising Modeling and Simulation Research laboratory. The appointee will have the chance to be involved in the projects with National Science Foundation, U.S. Department of Education, U.S. Department of Agriculture, National Institute of Health, National Academies of Sciences, Engineering, and Medicine, and Environmental Protection Agency.

Required Qualifications for Postdoc

- Ph.D. in Industrial Engineering, Operations Research, or closely related fields
- Knowledge of mathematical modeling, simulation, and optimization algorithms
- Knowledge of data analytics and machine learning
- Familiar with Python programming and simulation software (e.g., Simio, FlexSim)
- Good writing and presentation skills

Preferred Qualifications for Postdoc

- Experience in writing proposals
- Knowledge of database, virtual reality software (Unity), digital twin, and IoT
- Knowledge of Engineering Education research and pedagogy

Preferred Qualifications for Doctoral RAs

- B.S. or M.S. in Industrial Engineering, Operations Research, or closely related fields
- Strong background in mathematics, simulation, analytics, and programming
- Self-motivated

Application Procedures

Please email CV (including contact information of two references), unofficial transcripts, and a short paragraph of research interests to Dr. Zhu at wzhu21@central.uh.edu .

About University of Houston

The Carnegie Foundation for the Advancement of Teaching has recognized the University of Houston as a research university with very high research activity. The University of Houston is a public research university that is located on a park-like campus a few minutes from the Houston city center. Houston is an international and multicultural city, and the University reflects this diversity. It is a designated Hispanic Serving Institution, and it has been recognized as the one of the most racially and ethnically diverse research institution in the nation. In addition, the University is an ADVANCE institution, one of a select group of universities to receive National Science Foundation funds in support of our commitment to increase diversity and the participation and advancement of women faculty in science, technology, engineering, and mathematics (STEM) disciplines.