RICE UNIVERSITY

2024 Fall / 2025 Spring Ph.D. opportunities in Transportation System Engineering

Important Deadline for Fall admission: March 15, 2024 (Please contact ASAP)

Position Description:
The Mobility-X lab (https://mobi-x.ua.edu) in the Department of Civil and Environmental Engineering at Rice University invites highly motivated candidates to apply for two graduate assistant positions starting Fall 2024 or Spring 2025 working under Dr. Xinwu Qian, focusing on one or multiple of the following NSF, DOE and USDOT-funded research topics:

- The coupling between population dynamics and infrastructure systems
- Transportation electrification and the impacts on community and business resilience
- Structure and functional dynamics of transportation and human mobility networks
- Efficient and equitable multi-modal mobility systems (with real-world pilots)
- Machine learning for transportation system optimization

Applicants with strong mathematical modeling, machine learning and/or data analytics skills are encouraged to apply. Proficient programming skills are required (Python, Java, JavaScript, Julia, Matlab, C++). Applicants with a master's degree in Transportation Engineering, Industrial Engineering, Computer Science, or another relevant field in engineering and with prior research experience in one or multiple of the above research areas are preferred but not required. For inquiries about qualifications and enrollment, please send your CV, transcripts, and TOEFL/GRE (GRE can be waived) to xinwu.qian@ua.edu. Accepted Ph.D. students will be provided with very competitive financial support (a stipend of $35,000 per year) and tuition remission.

About the Lab PI
Dr. Qian will join Rice University in July 2024. He is currently an assistant professor & Hewson Faculty Fellow in Civil, Construction, and Environmental Engineering at the University of Alabama. His research spans methodological and applied pursuits, with a primary objective of fostering efficient and equitable transportation systems that offer enduring community benefits. His present areas of specialization encompass transportation electrification, public transportation, and shared mobility, emphasizing the connection between transportation systems and human systems/society. He is an early-career editorial board member of Transportation Research Part C and an editorial board member of Data Science for Transportation. His research is primarily funded by NSF, USDOT, and USDOE.

About Rice University and CEE Department
William Marsh Rice University (Rice University) is an elite private research university located in downtown Houston, Texas. It is one of the most prestigious and highly-rated higher-learning institutions in the world. Rice is regularly ranked as one of the best academic institutions in the world and is among the most selective in the U.S. The George R. Brown School of Engineering ranks among the top 20 engineering programs (US News & World Report) and is strongly committed to nurturing the aspirations of faculty, staff and students in an inclusive environment. The CEE department has 14 core faculty members, including the president of Rice University and three members of the National Academy of Engineering.