



Fully-Funded Ph.D. Research Assistant Position in Transportation Engineering at Rensselaer Polytechnic Institute

Position Description

The Department of Civil and Environmental Engineering at Rensselaer Polytechnic Institute (RPI) invites applications for a Ph.D. position in Intelligent Transportation Systems (ITS). This specialized role emphasizes the integration of machine learning and edge computing in transportation applications. It is highly desirable for the student to have a blend of expertise in transportation and computer science, and demonstrate commitment, self-motivation, and a proactive approach to research.

The student will work in the research group of Dr. Ruimin Ke. This is a fully-funded research assistantship with an anticipated commencement in Spring/Fall 2024. Before proceeding with the official RPI application, prospective candidates are encouraged to reach out to Dr. Ke for an initial discussion. Submit the following materials to ker@rpi.edu: Updated CV, Academic transcripts, GRE/TOEFL scores, A sample publication (if available).

About RPI

RPI is one of the top engineering universities in the United States. It is located near Albany, the capital of New York State, in Troy. It is 166 miles from New York and 172 miles from Boston. It is always ranked top 50 in the US. RPI has a close partnership with IBM, and it became the first university in the world to deploy an IBM quantum computer on campus. RPI was founded in 1824 by Stephen Van Rensselaer, who was then the richest man in the United States and the lieutenant governor of New York State. It was the first engineering university in the history of any English-speaking countries and is considered one of the 'New Ivy League' schools among 25 in the U.S. RPI is regarded as the cornerstone of American engineering education. During World War II, the school was an important research and education institution for the U.S. military, cultivating a large number of talents.

About Principal Investigator

Dr. Ruimin Ke embarked on his journey at RPI as an Assistant Professor in August 2023. He was a faculty member at the University of Texas at El Paso from 2021 to 2023. Dr. Ke possesses profound expertise in ITS, with a specialization in developing machine learning algorithms and edge computing systems tailored for ITS applications. Dr. Ke's academic background includes a Ph.D. and M.S. in Transportation Engineering from the University of Washington, an M.S. in Computer Science from the University of Illinois Urbana-Champaign, and a B.E. in Automation from Tsinghua University. His scholarly contributions to the field comprise over sixty peer-reviewed papers, a published book, and a few patents. He has led projects funded by the National Science Foundation, US Department of Transportation, and North America Development Bank, among others. Dr. Ke is an editor of four journals: Nature-Scientific Report, Transportation Research Record, Data Science for Transportation, and Journal of Airport Transport Management. He holds memberships in the TRB standing committee on Artificial Intelligence and Advanced Applications (AED50), the TRB standing committee on Statewide/National Transportation Data and Information Systems (AED10), the ASCE T&DI Infrastructure Systems Committee, the ASCE T&DI Artificial Intelligence in Transportation committee, and IEEE. More info: www.ruiminke.com