

Description

Dr. Yanbing Wang will be joining Arizona State University as a tenure-track Assistant Professor in the School of Sustainable Engineering and the Built Environment (SSEBE) starting Spring 2025. She will be leading the Transportation Cyber-Physical Systems Lab, which aims to improve transportation safety and efficiency through collaborative sensing, automation and data-driven methods. Her lab has multiple PhD/MS positions with flexible starting dates (spring/summer/fall 2025), with research assistance funding and tuition waivers available based on the position level. Desirable candidates are expected to work on one of the following topics:

- **Transportation Data Analysis:** Clean and process raw roadside sensor data, develop data-driven methods to analyze empirical data, and identify travel patterns
- **Traffic Simulation and Modeling:** Perform traffic simulation, calibration and data fusion using real-world traffic data from multiple data sources
- **Automated Driving System:** Develop and implement machine learning-based algorithms for behavior prediction, decision-making, and control of automated vehicles
- **Software-Hardware Integration:** Integrate and deploy software onto test vehicles for real-world field testing

Requirements

Desirable candidates should either have or be currently pursuing an MS/BS degree in an engineering discipline, such as Electrical and Computer Engineering, Mechanical Engineering, Civil Engineering, Industrial Engineering, or Computer Science. Research experience in traffic modeling, machine learning, data science, and/or robotics is a plus. Interested candidates are encouraged to send resume/CV to yanbing.wang@asu.edu with the email title “[Position] Application-[Full Name]”.

Background

Arizona State University (ASU) ranks No. 1 in innovation among American universities in the 2024 U.S. News & World Report's "Best Colleges" rankings. The Ira A. Fulton Schools of Engineering tied for No. 34 overall and placed in the top 20 for public engineering schools. Before joining ASU, Dr. Yanbing Wang worked at Argonne National Laboratory, leading the development of traffic micro-simulation platforms for energy evaluation funded by the Department of Energy. She received her Ph.D. from Vanderbilt University in September 2023, where she led algorithm development for Tennessee's I-24 MOTION testbed under Prof. Dan Work. Dr. Wang received the NSF Cyber Physical Systems Rising Star award (2023), five USDOT Dwight David Eisenhower Transportation Fellowships, and was a Sidney P. Colowick Graduate Scholar and Harold Stirling Vanderbilt Scholar. She has interned at Toyota Infotech Labs, MERL, and was a visiting researcher at IPAM, UCLA. For more information, visit <https://yanbingwang.com>.