### Chinese Overseas Transportation Association (COTA) Board of Directors (BOD) Nomination 2024



#### Ruimin Ke, Ph.D.

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## **Background and Qualifications**

Dr. Ruimin Ke embarked on his journey at Rensselaer Polytechnic Institute 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 intelligent transportation systems (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 at Elsevier "Machine Learning for Transportation Research and Applications", 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 Reports, Transportation Research Record, Data Science for Transportation, and Journal of Air Transport Management. He received multiple academic awards in recognition of his collaborative efforts, such as the 2023 TRB Best Paper Award, the 2022 Outstanding Paper Award from IEEE DTPI Conference, the 2022 ASCE ExCEEd Fellowship, the 2020-2021 COTA Best Dissertation Award, and the Editor's Choice Paper Award from Journal of Transportation Engineering. 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. Earlier this year, Dr. Ke was appointed as the Chair of the TRB Edge Computing Subcommittee at AED50. It is worth noting that Dr. Ke was on the COTA BOD as the student BOD member from 2016 to 2019 – he is familiar with the values and activities of COTA, and has been making significant contributions since 2016.

# **Envisioned Commitment**

As a candidate for the COTA BOD 2024, I envision a future where COTA not only serves as a hub for professional networking and knowledge exchange but also evolves into a pioneering force driving technological and sustainable advancements in transportation. My commitment is to:

- 1. **Foster Academic-Industry Collaboration**: Leveraging my academic connections, I aim to facilitate stronger ties between industry and academia, ensuring COTA remains at the forefront of emerging transportation technologies and trends.
- 2. **Empower Next-Generation Leaders**: Having been a student BOD member, I understand the importance of nurturing young talents. I plan to initiate mentorship programs and educational opportunities that cater specifically to students and early-career professionals.
- 3. **Promote Sustainable Transportation Practices**: In light of global environmental challenges, I will advocate for research and discussions within COTA on sustainable transportation solutions, emphasizing eco-friendly practices and innovations.
- 4. **Expand COTA's Global Reach**: Recognizing the importance of a global perspective, I aspire to extend COTA's influence beyond North America and China, making it a truly international platform for transportation professionals.

## **Commitment to Service and Excellence**

My commitment to COTA is unwavering. I pledge to serve with integrity, passion, and a relentless drive for excellence. Together, we can steer COTA towards new horizons of success and impact in the world of transportation.

## Endorsements from

- Dr. Cong Chen
- Dr. Cara X. Wang
- Dr. Yinhai Wang