



# Transportation Data Science Seminar Series

## Real-time video analytics empowered by machine learning and edge computing for smart transportation applications

### Seminar summary

Video analytics drives a wide range of smart city applications with great potential to benefit transportation and infrastructure systems. Most applications, e.g., traffic surveillance and autonomous driving, require not only high intelligence but also real-time processing capability. However, real-time video analytics is considered the “killer app” for many emerging technologies and often bottlenecked by the large amounts of video data, high computational cost, and limited network bandwidth. In this talk, I will introduce the challenges and advances in this area. Specifically, I will talk about my Ph.D. research in the design and field implementation of traffic video analytics systems empowered by machine learning and edge computing. This seminar series is co-organized by Department of Landscape Architecture and Urban Planning, Transportation Institute, and Institute of Data Science at Texas A&M University. It is operated by Texas A&M Urban Data Science Lab.

### Speaker's information



Dr. Ruimin Ke is a tenure-track assistant professor with the Department of Civil Engineering at the University of Texas at El Paso. He earned his doctoral and master's degree in civil engineering at the University of Washington in 2020 and 2016. He received a bachelor's degree in automation at Tsinghua University in 2014. Dr. Ke's research expertise and interest are in intelligent transportation systems and smart cities with focuses on video image processing, machine learning, and the Internet-of-Things applications. Dr. Ke has co-authored 45 peer-reviewed publications and his is a reviewer for 30 different journals. Dr. Ke is an editorial board member of the Journal of Big Data Analytics in Transportation, a member of the TRB standing committee on Statewide/National Transportation Data and Information Systems (AED10) and a young member of the ASCE T&DI Infrastructure Systems Committee. Dr. Ke is the recipient of the COTA Best Dissertation Award 2020-2021.

Time: 8:00-9:00 p.m. US Central Time (Thursday, March 31, 2022)

Zoom Meeting ID: 732 641 0814 Passcode: 575829

Direct Link: <https://tamu.zoom.us/j/7326410814?pwd=cGZKY045dmVkdzVRLy9MYWhocWorQT09>

Faculty Host: Xinyue Ye, Dept. of Landscape Architecture and Urban Planning & Urban Data Science Lab



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