Network Design and Traffic Management of Urban Air Mobility

Seminar summary
Urban Air Mobility (UAM) is an emerging concept proposed in recent years that uses electric vertical take-off and landing vehicles (eVTOLs), which is expected to offer an alternative way of transporting passengers and goods in urban areas with significantly improved mobility by making use of low-altitude airspace. In this seminar, Prof. Zhang will present a series studies in embracing the emerging UAM, from network design and demand estimation, automated flight planning and equitable resource distribution among multiple operators, to procedure design of UAM operations flying in and out of commercial airports.

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.

Speaker’s information
Dr. Yu Zhang is an Associate Professor with the Department of Civil and Environmental Engineering at the University of South Florida. Dr. Zhang leads the Smart Urban Mobility Laboratory at USF and serves as the co-Director of Center for Transportation, Environmental, and Community Health (CTECH), a USDOT Tier 1 UTC. Dr. Zhang applies mathematical programming and optimization techniques, simulation, econometric and statistical tools to solve the problems for resilient, efficient, and sustainable transportation systems.

Dr. Zhang has published extensively in top transportation journals such as Transportation Research Part B, C, D, E, and etc. Dr. Zhang is serving on the editorial board for Transportation Research Part C, Journal of Air Transport Management, and International Journal of Sustainable Transportation, and as an Associate Editor of International Journal of Transportation Science and Technology.

Dr. Zhang is actively involved in professional organizations. She serves as the Chair for Transportation Research Board (TRB) Airfield and Airspace Performance (AV060) committee (Apr. 2017 - Present). Dr. Zhang served as the President for Chinese Overseas Transportation Association (COTA) (Jan. 2016 - Jan. 2018). Dr. Zhang also serves as the President of Women in Transportation Seminar (WTS) Tampa Bay Chapter (Jan. 2020 - Present).

Dr. Zhang holds Ph.D. and M.S. from the University of California Berkeley in Civil and Environmental Engineering and Bachelor from Southeast University of China in Transportation Engineering.

Time: 8:00-9:00 p.m. US Central Time (Thursday, June 17, 2021)
Zoom Meeting ID: 732 641 0814 Passcode: 575829
Direct Link: https://tamu.zoom.us/j/7326410814?pwd=cGZKY045dmVkdzVRLy9MYWhocWorQT09

Faculty Host: Xinyue Ye, LAUP & Urban Data Science Lab