

2021 Annual Report

Intelligent Transportation Society of Texas

Student Chapter at University of Austin

June 2022



Contents

General Updates of the Chapter

Distinguished Guest Speakers

Social Events

Leadership Development

Application of Technical Knowledge

New Member Recruitment

Diversity and Inclusion

Training and Professional Development

Field Trips and Community Service

Member Roster

Hook 'em! 

General Updates of the Chapter

The student chapter of the Intelligent Transportation Society of America at The University of Texas at Austin (UT ITS) is proud to submit our Annual Report detailing our chapter's activities in the calendar year of 2021.

Despite the continued uncertainty and disruption that COVID-19 brought to our communities, classrooms, and workplaces, UT ITS students demonstrated their commitment to academic excellence, community engagement, and inclusive collaboration. Our chapter amended our bylaws to enable stronger cooperation with the UT chapters of the Women's Transportation Seminar (UT WTS) and Institute of Transportation Engineers (UT ITE), establishing the Transportation Student Council as a mechanism to better our cooperation in serving our students in 2019. The officers worked together to provide programming that included guest speaker series, campus outreach, networking and professional development opportunities, technical presentations, and social activities.

The officers of UT ITS, as of January 1, 2021, were as follows:

Kyle Bathgate, President

William Alexander, Executive Director

Jennifer Hall, Vice President for Publicity

Christian Sabillon, Vice President for Membership

Antonio Perez, Vice President for Operations

Carlin Liao, Treasurer

Kate Dannemiller, Secretary

Dr. Zhanmin Zhang, Student Chapter Advisor

Newly elected officers took charge from the outgoing officers on December 13, 2021. As part of the transition, the outgoing officers detailed their responsibilities and expectations, and outlined ways by which the members can effectively contribute to the development of the organization.

The current officers of UT ITS, as of December 13, 2021, are as follows:

Kangni Jiang, President

Kate Dannemiller, Executive Director

Jennifer Hall, Vice President for Publicity/Secretary

Christian Sabillon, Vice President for Membership

Vivek Verma, Treasurer

Mikhaela Sample, Public Policy Liaison

Dr. Zhanmin Zhang, Student Chapter Advisor

DISTINGUISHED GUEST SPEAKERS

In a continuation of our close collaboration with local professionals, UT ITS members attended events where there was much to learn from engineers working with local professionals and faculty members from different universities. We are thankful to our speakers who offered diverse learning opportunities involving some of the most pressing contemporary issues in transportation even during the pandemic.

Dr. Vincent Bernardin, Jr. | April 16, 2021, Virtual



Dr. Vincent Bernardin is the Vice President of Travel Demand Analytics for Caliper Corporation. He is the nation's foremost expert on transportation planning applications with big data and has project experience in twenty-seven states, Canada, Australia, and Israel developing and applying statewide, urban, corridor-level travel forecasting models for both plan development and major project studies. He presented virtually on the topic of Big Data in travel forecasting. He described the current main sources of Big Data used in transportation today, as well as examples of its application and the future outlook of field.

Richard Easley | May 5, 2021, Virtual



Richard Easley is the President of E-Squared Consulting Corporation. He has extensive experience in Civil Engineering in the areas of program management, design, planning, feasibility studies, materials inspection and testing and is taking a leading role in the planning and deployment of Intelligent Transportation Systems (ITS) technology on an international scale. His presentation was conversational in nature, and he took many questions from the audience. He spoke about his career path, how he started a business, and how to use your UT degree for success.

David Atkinson | September 8, 2021, Virtual



David Atkinson currently serves as in-house counsel for TuSimple, an autonomous trucking company. He has had three articles published in law journals discussing the intersection of law and policy with artificial general intelligence and quantum computing. His online lecture gave an overview of the AV world from an insider perspective, including discussions about the technology involved, the laws shaping the field, and important policy considerations that have not yet been addressed.

Dr. Eric Fitzsimmons | October 4, 2021, UT Austin



Dr. Eric Fitzsimmons is an associate professor at Kansas State University. His research focuses on various aspects of surface transportation safety and operations in both rural and urban environments. His presentation provided background on the importance of the U.S. freight rail system including supply chain characteristics, the engineering of track structure, and where civil engineering fit into the railroad industry. The presentation also gave an overview of the results from a study conducted for the Kansas Department of Transportation and lessons learned on engaging the railroads for research, work force development, and navigating a complex industry.

Dr. Elise Miller-Hooks | October 29, 2021, Virtual



Dr. Elise Miller-Hooks is a professor and Hazel Chair in Infrastructure Engineering at George Mason University. She has expertise in disruption planning and response, multi-hazard civil infrastructure resilience quantification and protection, stochastic and dynamic network algorithms. Her talk introduces a stochastic modeling approach that explicitly consider endogenous uncertainty for the problem of jointly prioritizing post-disaster roadway inspection and restoration actions.

Jake Gutekunst, P.E. | November 16, 2021, UT Austin



Jake Gutekunst, P.E. has worked on transportation engineering and planning projects with Kimley-Horn after graduating from UT Austin. He has experience with traffic and transportation design and planning studies, signal warrant studies, signal timing optimization and coordination, traffic impact studies, and geometric roadway design. He currently manages several projects with several municipalities in and around the Austin and San Antonio metro areas. He talked about the history of what has changed in plans and policies of the City of Austin and briefly introduced an overview of the mobility bonds passed in Austin during his presentation.

SOCIAL EVENTS

Through social events, UT ITS worked to create opportunities for members to connect and network with one another internally. We continued our participation in university-wide intramural sports with an indoor volleyball team this year. Additionally, UT ITS also hosted numbers of social events including two back-to-school pool parties, a football tailgate and happy hours, which allowed for outdoor and indoor interactions.

Indoor Volleyball Team

Spring 2021, Fall 2021

UT Football Tailgate

September 4, 2021

Pool Social

August 2, 2021 and September 9, 2021



Figure 2. Students going bowling together



Figure 3. Students enjoying a bike ride around Austin



Figure 4. Students enjoying food and drinks



Figure 5. Students ice-skating in Washington, D.C. during TRB

LEADERSHIP DEVELOPMENT

As part of UT ITS's mission to develop leaders out of our students, we encourage students to engage with on-campus leadership opportunities. This includes the Student Leadership Conference and the UT LeaderShape Institute hosted by UT Cockrell School of Engineering. By connecting with the broader learning community, we seek to motivate our members to further their executive education.

During transition periods, UT ITS officers conduct one-on-one meetings with their successors to review the chapter and university's organization bylaws, roles and responsibilities, lessons learned, and on-campus resources. Each officer undergoes university-wide leadership training that includes modules on ethics, campus resources, and codes of conduct. Each month, an ITS officer represents the organization at Engineering Student Life meetings, where organizations discuss their common challenges, campus events and opportunities, and resources available to organizations.

APPLICATION OF TECHNICAL KNOWLEDGE

This year our students demonstrated their knowledge through presentations at conferences and summits across Texas and the United States. The broad topics covered at each of these meetings highlighted the interdisciplinary, forward-thinking nature of the research done by UT's transportation department.

Bridging Transportation Researchers Conference

Virtual
August 5-6, 2021

TRB 101st Annual Meeting

Washington, D.C.
January 9-13, 2022



Figure 1. Students at TRB conference

NEW MEMBER RECRUITMENT

As part of our goal to build a strong network of transportation enthusiasts, UT ITS strived to demonstrate the community we share by hosting potential new students in an open house, sharing our stories, our research goals, and even our couches with visitors in hopes that they would one day join us on the Forty Acres. Additionally, we welcomed the students of the transportation program back to school with a happy hour to celebrate the return to classes.

Prospective Student Open House

March 12, 2021

New Student Happy Hour

August 18, 2021

New Student Campus Tour

August 18, 2021

DIVERSITY AND INCLUSION

UT ITS continues to cultivate a community that embraces and honors anyone with a mind for transportation innovation, regardless of race, ethnicity, sex, national origin, sexual orientation, faith, or belief. Transportation issues are complex, socio-cultural, and often magnify the inequities found throughout our social systems and built environments. It is imperative for transportation leaders to be well-informed, empathetic, and equity-minded when developing and implementing solutions, and UT ITS works to create such leaders.

The membership of UT ITS is composed of both undergraduate students and graduate students in the civil engineering and transportation programs. UT ITS has two cross-discipline liaisons; one that helps to coordinate with students in the LBJ School of Public Affairs and the other, with the students in UT Austin's Community and Regional Planning (CRP) program. All speaker events are circulated to public affairs, environmental engineering, CRP, geography, and computer science students and faculty, and their participation is encouraged.

TRAINING AND PROFESSIONAL DEVELOPEMENT

As part of our desire to connect UT students with exciting and fulfilling careers in transportation, we make every effort to prepare our students with the skills necessary to make a lasting impression on employers. To do so, our students participated in the Graduate Engineering Council's seminar "Career Paths After Graduate School." The

GEC seminar was focused on informing and preparing engineering graduate students for their next chapter. The seminar included a discussion of career opportunities and the faculty recruitment process.

GEC Career Paths After Graduate School

October 13, 2021

FIELD TRIPS AND COMMUNITY SERVICE

In the past, UT ITS has worked with industry peers to host field trips and technical tours to the City of Austin's Transportation Mobility Center, CapMetro's headquarters and transit facilities, and tour of bike facilities with city staff. UT ITS has also partnered with UT ITE and UT WTS to volunteer at the Central Texas Food Bank, participate in the Keep Austin Beautiful Street cleanup event, and supported the Cockrell School of Engineering's Spring and Fall Expo events. Because of university-wide restrictions on organizations' activities and engagement, opportunities for field trips and technical tours were limited this year. As the university's restrictions loosen, UT ITS plans to reintroduce this programming to members.

MEMBER ROSTER (AS OF JUNE 2022)

No.	First Name	Last Name
1	Sudesh	Agrawal
2	MD.	Al-Amin
3	William	Alexander
4	Katherine	Asmussen
5	Philip	Ayebare
6	Srijith	Balakrishnan
7	Maria	Bassil
8	Kyle	Bathgate
9	Carolina	Baumanis
10	Meredith	Brown
11	Jamie	Byers
12	Noah	Chambers
13	Matt	Dean
14	Angela	Haddad
15	Jenny	Hall
16	Manar	Hasan
17	Yantao	Huang
18	Hassan	Iqbal
19	Kangni	Jiang
20	Karen	Kalter
21	Moo Yeon	Kim
22	Shing-Fu	Kuo
23	Jooyong	Lee
24	Ruohan	Li
25	Tiixin	Li
26	Taehoon	Lim
27	Erick	Lopex
28	Anna	McAuley
29	Aupal	Modal
30	Michael	Moore
31	Priyanka	Paithankar



32	Shidong	Pan
33	Patil	Priyadarshan
34	Stefanos	Politis
35	Christian	Sabillon Orellana
36	Mikhaela	Sample
37	Kevin	Scruggs
38	Harry	Smith
39	Vivek	Verma
40	Suyash	Vishnoi
41	Rydell	Walthall
42	Hongbin	Xi
43	Cesar	Yahia
44	Haonan	Yan