



Annual Report 2015-2016



*Dedication to Professional Development, Social Enrichment, and
Service through Transportation Engineering*



Annual Report of Student Chapter Activities For the Period November 1, 2015 to October 31, 2016

Student Chapter of:	
The University of Texas at Austin	
1. Chapter Officers	
President	Rachel Hure
Vice President: Publicity & Outreach	Manar Hasan
Vice President: Membership	Swati Agarwal
Treasurer	Patrick Jordan
Secretary	John Helsel
2. Student Chapter Membership	
Number of Student Chapter Members: 28	
Number of Student Members of the Institute: 28	
Number of Students eligible to be Student Member of Institute: 955	
3. Information on Transportation Engineering Enrollment	
Number of undergraduate students in academic department: 900	
Department: Civil, Architectural & Environmental Engineering	
Does your curriculum allow Undergraduate students to major or minor in Transportation: No	
Number of Graduate Students in Transportation: 55	
4. Student Chapter Activities Summary – see attached (Refer to Pages 4-13)	
5. Roster of Student Chapter Members – see attached (Refer to Page 14)	

Report Submitted by:

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Student Chapter President
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Approved By:

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Student Chapter Advisor
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Submitted: October 31, 2016



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Message from the President

We are pleased to submit the 2015-2016 Annual Report for the University of Texas at Austin Student Chapter of the ITS Texas, which is the Texas chapter of the Intelligent Transportation Society of America (ITS America). As the field of transportation engineering rapidly evolves, University of Texas ITS Student Chapter continues our commitment to serve our members by providing quality professional development, social enrichment, and community service opportunities. The newly elected officer team convened in October 2015 to develop a common vision for the organization, establishing the following goals:

- ◆ Increase membership
- ◆ Improve fundraising efforts
- ◆ Contribute through community service
- ◆ Support professional development
- ◆ Cultivate partnerships and strengthen fellowship

This past year our ITS Student Chapter invited seven guest speakers to participate in our Distinguished Lecturers Series, organized four technical events on bicycle and pedestrians in ITS, Synchro, vehicle manufacturing, and women in transportation, as well as continued to give back to the community by providing education and traffic engineering expertise to local communities. We maintained our strong presence at national and state conferences and continue striving towards increasing our technical knowledge and professional network.

On behalf of the Officer Team, I would like to thank ITS Texas and CTR for your continued support of University of Texas ITS Student Chapter. We are also grateful for the guidance that our faculty advisor and Department Director, Dr. Zhanmin Zhang, has provided. We all have really enjoyed the opportunity to serve the transportation community in the past year and are happy to know that we are passing the torch to a great team of new officers.

Best regards,

Rachel Hure
UTexas ITS President



General Meetings

The objective of our general meetings is to give members an opportunity to provide input on the direction of our ITS Student Chapter. New officer elections were held during our fall semester general meeting on October 8, 2015. Current officers detailed their responsibilities in order for members to get a better idea of how they can contribute to the organization.

Once the newly elected officers took over, we have geared our biannual general meetings towards engaging new potential members and collecting feedback of what they would like to see in the upcoming semester. Before the spring meeting, officers reached out to several undergraduate classes to tell them more about ITS and pique their interest in a career in transportation engineering at an earlier stage of their education. We collected many email addresses from incoming engineering students with a common interest in solving transportation problems at our organization's informational booth at Gone to Engineering at the start of the Fall 2016 semester.

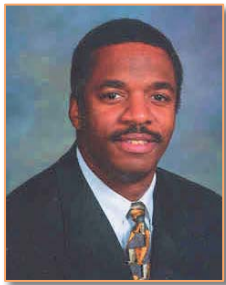
Based on the feedback sheets that we passed out during our general meetings, **our member base indicated a high level of interest in guest speaker events, software training, technical tours, conferences, and social activities.** Our members are particularly interested in speaker events geared towards topics such as Autonomous & Connected Vehicles, Planning & Forecasting, Public Transportation, Construction, Materials & Pavements, Economics & Finance, Energy & Environment, and Operations & Traffic Management. Since then, we have placed a major focus on setting up events that are geared towards the interests of our members.



Professional Development

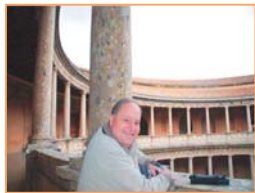
In keeping with ITS America's mission to foster professional development, the ITS Student Chapter offered a diverse selection of learning opportunities involving some of the most pressing contemporary issues in transportation. These opportunities included participation at various technical conferences, networking events, and hosting transportation leaders through our speaker series. The Chapter continued its efforts to provide technical training for its students by offering a tour of Toyota's manufacturing plant in San Antonio, seminar for Synchro in Galveston, and a webinar by USDOT on ITS applications for bicycles and pedestrians.

DISTINGUISHED GUEST & TECHNICAL SPEAKERS



Richard Easley | November 12, 2015 & April 21, 2016

Richard Easley spoke at UT twice this past year to present on freight technology and performance measures including “Public Agencies and Innovative Freight Technologies: Step Up or Step Aside” and “Variability of Freight Performance Measures.” His sessions explored how freight networks continue to deploy innovative solutions to address challenges and improve performance. Two specific innovative technologies he discussed were truck platoons and delivery drones.



Ned Levine | December 8, 2015

Ned Levine, urban methodologist, planner and policy analyst in Houston, TX, presented a discussion relating the location of late night on-premise alcohol beverage outlets and DWI crashes in Houston. The talk explored one of many important safety concerns in the field of transportation using statistical methods and travel demand modeling.



Dr. Dan Work | April 8, 2016

Dr. Daniel Work, Assistant Professor of Engineering at the University of Illinois at Urbana-Champaign, presented his research on the use of Bluetooth in predicting disruptions to the traffic network. Using statistical models to predict whether low travel times were attributable to accidents or heavy traffic, Dr. Work showed that his method was able to accurately alert emergency services an order of magnitude faster than current.



Dr. Rachel Copperman | October 4, 2016



Dr. Rachel Copperman, a Senior Associate with Cambridge Systematics and UT alumna, engaged students and researchers at Texas’ Center for Transportation Research with her presentation on risk analysis and the uncertainty of travel demand modeling. This general discussion was spurred by her firm’s experience in modeling risk in the California High-Speed Rail project.

Tony Hull & Dr. Billy Fields | October 20, 2016



Tony Hull, a freelance nonmotorized transportation consultant, and Dr. Billy Fields, an assistant professor of political science at Texas State University, were instrumental in founding the International Sustainable Transportation Engagement Program (I-STEP). This program works to create streets that are safe for people of all ages and to create more livable communities that are economically, socially, and environmentally sustainable. In their talk, they explored the lessons they learned in evaluating best practices, data collection, and creating active engagement with diverse and multi-disciplinary groups over projects in the Netherlands and Brasov, Romania.

CONFERENCES & MEETINGS

Our University of Texas ITS Student Chapter members are highly encouraged to attend and present at transportation conferences to be on the cutting edge of research, foster their professional development, and to network with transportation professionals and students.

2016 TexITE Spring & Fall Meetings

The 2016 TexITE Spring Meeting, held in Galveston, gave our members the chance to interact with industry professionals and showcase their outstanding work. The eleven members from our Chapter that attended the Spring meeting participated in networking events and attended technical sessions on contemporary challenges within the transportation industry. One of our members, Kevin Savage, received the Outstanding Student of the Year Award for his demonstrated academic and leadership excellence and a team of our members, composed of both graduate and undergraduate students and coached by Ph.D student Meredith Cebelak and Dr. Mason Gemar, competed for Nationals in the Traffic Bowl Competition.

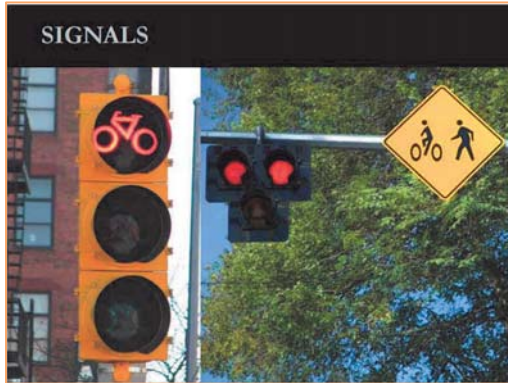


The 2016 TexITE Fall meeting, held in beautiful Fort Worth, provided an opportunity for many new members to engage with industry leaders and for established students to display their work. Eleven students attended the meeting, and four presented posters at the student poster session. Students also visited the planetarium and networked with young professionals.



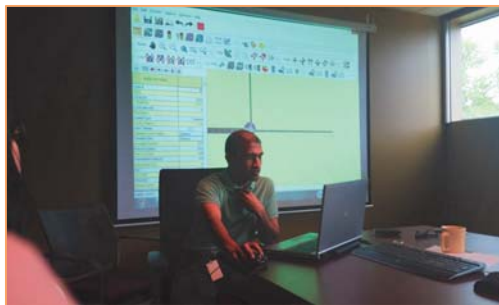


TECHNICAL EVENTS



USDOT Webinar: ITS Applications for Bicycles and Pedestrians

The UT ITE/ITS Student Chapters participated in a webinar on December 2, 2015 regarding ITS Applications for Bicycles and Pedestrians. The webinar consisted of three separate presentations that highlighted traffic signal applications that catered to bicycles and pedestrians. The event provided a technical presentation to our students without having to leave the comfort of the Ernest Cockrell Jr. (ECJ) Engineering building on the UT Austin campus.



SYNCHRO Software Training

Trafficware hosted members of the UT ITE/ITS Student Chapters on March 30, 2016 for a hands-on Synchro and SynchroGreen traffic software training at their offices in Sugar Land, Texas. The afternoon provided our members with an opportunity to learn a program that can be marketed to potential employers in the industry and a chance to connect with professionals in the field of simulation.



Boots on the Ground, Flats in the Boardroom

On May 17, 2016, the ITS UT Austin Student Chapter partnered with University of Texas Center for Transportation Research (CTR) and ITE and WTS, hosting a powerful evening program with BART general manager Grace Crunican and former MassDOT and MBTA board member Liz Levin, co-authors of “Boots on the Ground, Flats in the Boardroom: Transportation Women Tell Their Stories.” An insightful panel was held with CDM Smith vice president Dana C. Hook, PE; former FAA Airports Division manager LaVerne Francis Reid; and vice chair of the National Infrastructure Advisory Council and founder of her eponymous consulting firm Dr. Beverly Scott.





Toyota Plant Tour

The UT ITS Student Chapter drove down to San Antonio to tour the Toyota manufacturing plant. Members witnessed the complex and safety-driven operations required to build Toyota's trucks during a guided tour of the facility. In addition, members learned about the in-depth history of the company and evolution of technology over time. Students were able to see the inner workings of vehicles through cut-out models of different cars and trucks.



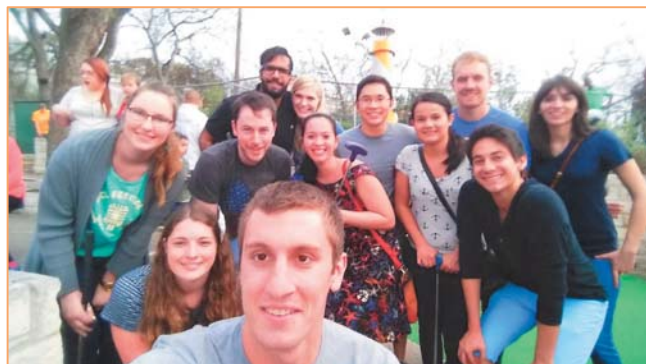
Social Enrichment

We take pride in fostering a community of fellowship among undergraduates, graduates, and faculty. Our student chapter’s social activities are a key component to developing relationships and support within our transportation engineering family.

SOCIAL EVENTS

Super bowl Party, Mini-Golf, Game Night, Pool Party

This past year members took breaks from the responsibilities of school and relaxed at several social events. Included among these were a Super bowl watch party, mini-golf, game night, and pool party.





RECRUITMENT, ORIENTATION, & GRADUATION EVENTS

Spring 2016 Graduate Recruiting Weekend

Graduate Recruiting Weekend offers current students the opportunity to showcase the program and welcome prospective students to campus. In addition to housing and transportation, our ITS Student Chapter provided social activities, a campus tour, and an insider’s perspective to the school.

Fall 2016 Graduate Student Orientation

Our University of Texas ITS Student Chapter also played an active role in welcoming incoming graduate students to campus this August. We held a variety of social and orientation events geared toward showing the new students around Austin. Highlights included eating tacos, making a trip to IKEA, and listening to music on Rainey Street.

Fall 2015 Graduation Send-Off

We hosted an end of the semester celebration for everyone to get together before the holiday break and to wish the many graduating students good luck in their new endeavors. We also gave the graduates a holiday-inspired gift.



INTRAMURAL SPORTS

Outdoor and Indoor Soccer

As an integral part of the Longhorn experience, Intramurals at The University of Texas promote sportsmanship and engage students in physical activity. The chapter promotes the opportunity for members of the organization to participate in team-building and learning experiences through sports.

This past year we participated into two co-ed leagues: Intramural Outdoor Soccer in October 2015 and Indoor Soccer in April 2016. The games served as a great bonding experience between the undergraduate and graduate members. Members improved their skills and worked together as a team. The chapter continues to play soccer together regularly.





Community Service

Community service is an integral part of the mission at our University of Texas ITS Student Chapter because we see it not only as a way to give back to the community, but also as an effective way to enhance awareness about the importance of transportation in everyday life. As such, each year our members participate as volunteers in various activities through the University and the city.

Introduce a Girl to Engineering Day

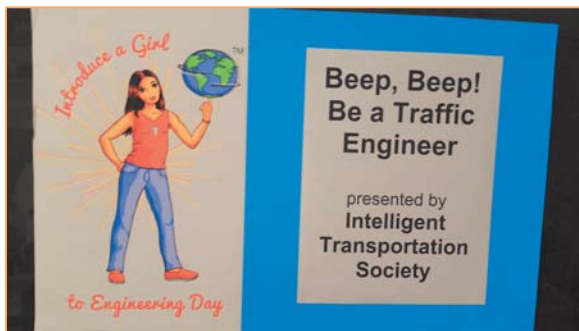


A traditional event during Engineers Week at the University of Texas at Austin is the annual Introduce a Girl to Engineering Day for girls in grades first to eight. On February 27, 2016, students and their parents are invited to UT to spend an afternoon learning how fun it is to be an engineer. The chapter once again volunteered with our ITS Student Chapter and hosted an activity room to teach the girls about transportation engineering. This year's featured activities included traffic operations simulations, conversations about basic traffic operations, and the importance of safe driving.



ExploreUT

On March 5, 2016, members volunteered during Explore UT; Explore UT, better known as the largest open house in Texas, is a day-long celebration during which the university opens the campus doors to the state. The event features close to 400 programs held across the Forty Acres. Our ITS Student Chapter members led children of all ages through participating in fun, educational, and engaging activities. Which introduced them the field of transportation engineering.





Member Roster

1	Agarwal	Swati	Graduate
2	Alrashidan	AJ	Graduate
3	Balakrishnan	Srijith	Graduate
4	Bujanovic	Pavle	Graduate
5	Chin	Kristie	Graduate
6	Deering	Amanda	Graduate
7	Dias	Felipe	Graduate
8	Murthy Gurumurthy	Krishna	Graduate
9	Haj	Ramez	Graduate
10	Hasan	Manar	Graduate
11	Helsel	John	Graduate
12	Hure	Rachel	Graduate
13	James	Rachel	Graduate
14	Jordan	Patrick	Graduate
15	Kilgore	Scott	Graduate
16	Martinez Alonso	Wilfrido	Graduate
17	Nair	Gopindra	Graduate
18	Ng	Andressa	Graduate
19	Pandey	Venktesh	Graduate
20	Patil	Priyadarshan	Graduate
21	Politis	Stefanos	Graduate
22	Quarles	Neil	Graduate
23	Savage	Kevin	Graduate
24	Vanhout	Alexander	Graduate
25	Walthall	Rydell	Graduate
26	Yahia	Cesar	Graduate
27	Zuehlke	Jennifer	Undergraduate
28	Zuniga Garcia	Natalia	Graduate

Student Recognition

Pavle Bujanovic received a one year fellowship at the Federal Highways Administration Turner Fairbank Highway Research Center in Virginia through the Dwight D. Eisenhower Transportation Fellowship Program.

Kristie Chin received the Thrust 2000 Graduate Fellowship in Engineering, a multi-year graduate fellowship presented by the UT Cockrell School of Engineering.

Felipe Dias received the Talbot S. Huff, Sr. Highway Engineering Graduate Fellowship from the UT Cockrell School of Engineering.



John Helsel received the 2016-2017 Eisenhower Graduate Transportation Fellowship, awarded by the Universities and Grants Programs of the National Highway Institute, Federal Highway Administration, and the George J. Heuer, Jr. PhD Endowed Graduate Fellowship, awarded by the UT Cockrell School of Engineering.

Rachel Hure received the Harold Dalrymple Endowed Presidential Scholarship, awarded by UT Austin alumnus Dr. Nasser I. Al-Rashid in honor of the former Center for Transportation researcher.

Rachel James received a 2016 Pathways Internship at the Federal Highways Administration's Turner-Fairbank Highway Research Center. This fellowship is a nationally competitive internship to support graduate students with interest in government service. Rachel also received both the Heart of Texas Helene M. Overly Fellowship from WTS.

Scott Kilgore was awarded the Mary Kate (Kitty) Collins Memorial Endowed Presidential Scholarship in Civil Engineering, which was named in honor of the first employee at the Center for Transportation Research, through the UT Cockrell School of Engineering.

Michael Levin received a 2016-2017 Eisenhower Graduate Transportation Fellowships, awarded by the Universities and Grants Programs of the National Highway Institute and the Federal Highway Administration.

Stefanos Politis received the Thrust 2000 Graduate Fellowship in Engineering, a multi-year graduate fellowship presented by the UT Cockrell School of Engineering, and a UT Austin Graduate School Fellowship.

Venktesh Pandey received the 2015 CAS-ITE Scholarship and the 2015 ITS Texas Scholarship.

Pavle Bujanovic and **Michele Simoni** presented their paper, "A comprehensive heuristic toolbox for the optimal location, routing, and fleet choice of urban consolidation centers," at the Urban Freight and Behavior Change (URBE) conference in Rome, Italy.

Kevin Savage presented his poster, "Integrating High Speed Rail Systems into Urban Environments: A Comprehensive Evaluation" at the 2016 TexITE Fall Meeting in Ft. Worth, Texas.

Venktesh Pandey and **Ehsan Jafari** (and their advisor Stephen Boyles) presented their paper, "Static Traffic Assignment- A Decentralized Approach" at the 95th Annual Meeting of the Transportation Research Board in Washington, D.C.

Venktesh Pandey presented his poster "Optimal Dynamic pricing for managed lanes with multiple entrances and exits" at the 2016 TexITE Fall Meeting in Ft. Worth, Texas.