

Intelligent Transportation Society (ITS) Student Chapter



University of Texas at

Arlington (UTA)

3/28/2024

Chapter Management

In the period between October 24, 2023, and March 25, 2024, a total of 11 meetings were held. Detailed information for each meeting can be found in the table provided below:

SI.	Date	Meeting Type	Location	Presentation/Speaker/ Participant	
1	11/2/2023	VISSIM Training for Texas State University Session 2	Online	Swastik Khadka	
2	11/7/2023	Bi-Weekly Meeting	UTA	Jennifer Butcher	
3	11/16/2023	Training Event for AVAST to Graduate students	UTA	Graduate Students	
4	11/28/2023	Lab-Visit to SMART and ACTION LAB	UTA	Student Members	
5	1/23/2024	General Body Meeting	UTA	Student Members	
6	1/24/2024	Fundraising Event T-shirt sale	UTA	Student Members	
7	1/26/2024	Nedderman Hall Student Organization Spotlight	UTA	Swastik & Mino	
8	2/6/2024	Transportation Management Center Visit at Arlington	Arlington Jail	Student Members, Christy Lambeth	
9	2/20/2024	Bi-Weekly Meeting	UTA	Elizabeth	
10	2/28/2024	Maverick Organization Fair	University center	Md Ashraful Imran, Mino Aji, & Nisha Dhungana	
11	3/5/2024	Bi-Weekly Meeting	UTA	Christy Lambeth	

 Transportation Management Center Visit in Arlington: A notable event was our excursion to the Transportation Management Center (TMC) located in Arlington. This highly praised activity, conducted in partnership with the Institute of Transportation Engineers (ITE), provided students with a firsthand experience of the TMC's operations. Our chapter effectively promoted the event, drawing interest from members of Women in Transportation (WTS) as well. (Image D)

Regarding leadership matters, we held elections for the 2023-2024 term. Due to significant student interest and considering our forthcoming initiatives, we made the decision to enlarge our team. Specifically, we elected two social media Officers to manage both online and offline promotions, including flyer creation. Additionally, two Student Liaison Officers were selected to enhance partnerships with other organizations. Notably, one of the Student Liaisons is an undergraduate student, creating avenues for undergraduates to engage actively. In total, we now have 14 general members and 8 elected officers, as listed below:

SI.	Name	Position
1	Pengfei (Taylor) Li, Ph.D., P.E	Faculty Advisor
2	Md Ashraful Imran	President
3	Swastik Khadka	Vice President
4	Sijan Shrestha	Treasurer
5	Mino Aji	Student Media Officer
6	Nisha Dhungana	Student Media Officer
7	Andrew Mares-Camarena	student Liaison Officer
8	Jais Jacob Namkulam	student Liaison Officer

Networking Opportunities

 Bi-weekly Meetings: We conduct bi-weekly meetings that showcase guest speakers from diverse companies. These speakers share their project experiences, discuss problem-solving strategies, and provide recommendations. This platform allows students to interact with speakers, gain insights into their companies, and improve networking opportunities. (Image A, B, and C)

Leadership Enhancement

Our student chapter places great importance on leadership as a vital skill for professional growth. To foster this, we encourage our students to demonstrate their abilities by giving presentations or participating in poster sessions at different meetings, including ITS America, TRB meetings, and the annual TEXITE gatherings.

- I. Opportunities for Presentations and Posters: During the TexITE 2023 Fall meeting in San Antonio, two of our students had the chance to travel and present their work. Syed Ameenuddin Hussaini presented on "Traffic Near-Miss Detection for Pedestrian Safety at Signalized Intersections," while Swastik Khadka showcased a poster titled "Multicriteria Planning Framework for Regional Intersection Improvement Using Telematics Data of Connected Vehicles".
- II. **Transportation Research Board 2024:** During this reporting period, our student chapter sent three students with four poster presentations to TRB 2024 (Image E and F). Md Ashraful Imran, Swastik Khadka, and Peirong (Slade) Wang exhibited their work at the Transportation Research Board meeting. Moreover, our students enthusiastically engaged in several networking events, establishing connections with peers and professionals from diverse universities. Below are the details of the presentations:
 - <u>Md Ashraful Imran:</u> Evaluation of Community-Level Benefits for Regional Contraflow Strategy During Disaster Evacuation
 - <u>Swastik Khadka:</u> Enhancing Traffic Signal Timing Design via the Automated Traffic Signal Performance Measures (ATSPM) in the Loop Simulation: A Digital Twin Approach
 - <u>Peirong (Slade) Wang:</u> A Graphical Approach to Automated Congestion Ranking for Signalized Intersections Using High-Resolution Traffic Signal Event Data
- III. 2023 Eisenhower Transportation Fellowship Award: Our vice president, Swastik Khadka,

reached a notable achievement by earning the 2023 Eisenhower Transportation Fellowship. This prestigious award was granted at the Transportation Research Board event. Swastik not only had the opportunity to network with fellow awardees but also presented his research work at TRB as part of the Eisenhower team. This recognition underscores his commitment and valuable contributions to the transportation field.

IV. Scholarships: Two students were awarded the Texas ITS scholarship for their research paper, which was presented and recognized during the fall ITS meeting held at College Station. (Image L)

STEM Outreach to K-12 Students

Our student chapter proactively began collaborating with the "Irma L. Rangel Young Women's Leadership School" within Dallas ISD. This school hosts a G.I.R.L.S in STEM society, presenting an excellent opportunity for partnership. Our aim is to involve high school students in educational programs focused on transportation. We have scheduled a meeting on the 26th and 27th of March at the school, transforming it into an outreach and collaborative event. We are enthusiastic about inspiring and sharing insights with these young minds regarding the transportation industry.

Implementing Technical Knowledge

The students in our student chapter actively applied their technical knowledge in diverse ways:

- I. Publication: Our chapter members have authored technical papers that have been successfully published in various journals. Md Ashraful Imran contributed to the Journal of Transportation Planning & Technology by publishing a paper aimed at predicting tripmaking to different shopping facilities using two years of Streetlight data (pre-pandemic and during the pandemic). Swastik Khadka's work appeared in the ASCE Journal of Transportation Engineering, focusing on intersection ranking utilizing ATSPM data for the ASCE journal.
 - Imran, M. A., & Hyun, K. (2023). In-store shopping trip predictions and impact factors during COVID-19 emergencies. *Transportation Planning and Technology*, 1–26. https://doi.org/10.1080/03081060.2023.2282059
 - Khadka, S., & "Taylor" Li, P. (2024). Multicriteria Planning Framework for regional intersection improvement using telematics data of connected vehicles. *Journal of Urban Planning and Development*, 150(1). https://doi.org/10.1061/jupddm.upeng-4705

New Member Intake

The student chapter is actively utilizing social media to broaden our audience. We have effectively attracted 6 new members, with an impressive 4 of them being elected as officers. In order to bolster our online visibility, we have launched a new Instagram page and a dedicated LinkedIn page for the ITS student chapter at Arlington. These platforms are

regularly updated with news about our activities.

I. **MAVORGS Fair:** We performed an outreach event at the UT Arlington Organization Fair. As a result of this event, we successfully recruited one new student. **(Image J and K)**

Our efforts to engage with students have resulted in connections with three undergraduate students who actively participate in our biweekly events. Brandon Herrera, a former vice president, and Andrew Camarena, our current student liaison officer, demonstrate the impact of student involvement. Additionally, due to increased engagement, our student chapter is proudly sending seven students (including 1 undergraduate, 4 graduates, and 3 Ph.D. students) to the Spring 2024 TexITE meeting at College Station. This represents a significant increase from our previous participation, reflecting a remarkable 75% growth. Additionally, we have sought assistance from MavORGS for travel support for the upcoming ITS America event, highlighting our emphasis on collaboration within our university community.

Fostering Diversity and Inclusion

- I. Demographics: Our student chapter takes great pride in its diversity, encompassing a mix of undergraduate and graduate students, including 3 undergraduates. Our members represent various nationalities and ethnic groups, contributing to a vibrant multicultural environment within our chapter. Additionally, we extend a warm welcome to students from diverse departments, such as construction management and urban planning, promoting and encouraging interdisciplinary collaboration.
- II. Inclusion: Our dedication to inclusivity is evident during our bi-weekly meetings, where students from groups like Women in Transportation actively engage and participate. Notably, individuals like Mino Aji, who is involved in multiple student chapters, play a pivotal role in connecting us with other chapters for collaborative initiatives. We uphold a strong partnership with the ITE student chapter at UT Arlington, ensuring ongoing collaboration and fostering a supportive community.

Professional Growth Initiatives

- SMART (Sustainable Mobility and Resilient Transportation) LAB VISIT: Our students had an exciting opportunity to visit the SMART Lab, where they engaged with driving simulators. The visit began with a brief training session on how to correctly use these simulators. After the training, students were able to personally experience the driving simulators themselves.
- II. **PTV VISSIM Training:** Our vice president, Swastik Khadka, had the honor of leading a tutorial/training session for Texas State University. This virtual training session, held via Zoom, was centered around providing insights into the PTV VISSIM simulation software.

Field Study Tours

I. Lab Visit to SMART and ACTION LAB: On November 28, 2023, our student chapter organized visits to two different labs. The first stop was at Dr. Hyun Kate's SMART Lab

(Image G), where students had the chance to experience the driving simulator. At the second lab, Dr. Taylor Li's ACTION Lab (Image H), students were introduced to real-world traffic cabinets and gained insights into how they can be integrated with the simulation engine PTV VISSIM.

II. Transportation Management Center (TMC) Visit at Arlington: On January 26, 2024, our student chapter arranged a visit to the Transportation Management Center (TMC) in Arlington City, situated at Arlington Jail. The event was enhanced by the presence of Christy Lambeth, and the visit was guided by City Engineer Chris Funches and Manisha Josi from the City of Arlington. About 15 students actively took part in this informative event.

Finance/Budget

		Planned Amount	Actual Amount
Beginning Balance	0.00	0.00	
Income			
	ITS Texas Support (Annual support provided)	500.00	500.00
	Other ITS Support (please specify)	0.00	0.00
	Donation from Speakers	0.00	0.00
	Other (Specify)	0.00	0.00
Total Income		500.00	500.00
Expense		0.00	0.00
Total Expenses		0.00	0.00
Ending Balance		500.00	500.00

We have just recently launched our organization, so our funding is still in its early stages. Also, we hold joint meetings, and typically, the funding for these gatherings is covered by ITE.

PHOTOS

