

## THE UNIVERSITY of TENNESSEE

**KNOXVILLE COLLEGE OF ENGINEERING** 

## **ITE Student Chapter Annual Report**

April 1, 2012 to March 31, 2013

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Date: 2/15/2013

Date: 2/15/2013

Contents Approved by: Dr. Chris Cherry (Name)



## **President's Letter**

Greetings! The past year served as a gracious host to a wide range of bonding experiences and achievements. I feel very grateful and honored to have served a second year as President and to be a part of this memorable time for our chapter.

This year we welcomed five new students, both undergraduate and graduates, to our group. The new students have brought new energy and ideas. We also said farewell to some well-loved members as they went on to consulting, research and teaching jobs. Along with new arrivals and sad departures our chapter will also be welcoming a new transportation faculty member as the Civil Engineering department starts a search for our next transportation professor. The ongoing



support from our students, professors, and department staff has allowed our chapter to grow in not only size, but opportunities.

The members of UTK's ITE student chapter continue to earn many awards through competition, scholarship, and publication. Four of our members – Amber Woodburn, Bryan Bartnik, Hongtai Yang, and Jianjaing 'J.J' Yang – recently gained state and regional recognition through competition in the 2012 ITE Traffic Bowl. In which they won the state competition and had a very strong showing in the southern district competition. We also had multiple members highlighted at the TSITE and SDITE meetings when they were honored with Student Paper awards.

Our chapter is pleased to share all of our activities and more with you in the following report. Enjoy!

Sincerely,

Stephanie Hargrove



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## I. Chapter Business

The following sections summarizes the official business of our student chapter with respect to membership, chapter meetings, and plans for the coming year.

### Membership

#### Student Chapter Membership

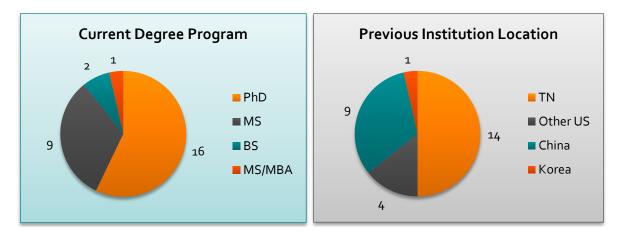
- NUMBER OF STUDENT CHAPTER MEMBERS:\_\_28\_\_\_\_
- NUMBER OF STUDENT MEMBERS OF THE INSTITUTE: 12
- NUMBER OF STUDENTS ELIGIBLE TO BE A STUDENT MEMBER OF THE INSTITUTE: 28
- NUMBER OF FACULTY MEMBERS WHO ARE CURRENT ITE MEMBERS:\_\_\_\_4\_\_\_\_

#### Information on Transportation Engineering Enrollment

- ▲ NUMBER OF UNDERGRADUATE STUDENTS IN YOUR ACADEMIC DEPARTMENT:\_\_\_\_317\_\_\_\_
  - 0 FULL TIME:\_\_\_\_315\_\_\_\_
  - O PART TIME:\_\_\_\_2\_\_\_
- DOES YOUR CURRICULUM ALLOW AN UNDERGRADUATE STUDENT TO MAJOR OR MINOR IN TRANSPORTATION?\_\_\_\_NO\_\_\_\_\_
- NUMBER OF GRADUATE STUDENTS IN TRANSPORTATION: 18\_\_\_\_\_18\_\_\_\_\_
  - 0 FULL TIME:\_\_\_\_15\_\_\_\_
  - 0 PART TIME:\_\_\_\_3\_\_\_\_

#### Membership Profile

Student membership this year reflected a group with diverse interests and backgrounds. Of our 28 student members, the majority are doctoral students, many of who are pursuing joint degree programs with UT Knoxville's statistics department. Approximately half of our students pursued their undergraduate degrees at UT Knoxville. Research opportunities have led three of our American students to summer studies in China, the home country of nine of our members. Our membership is primarily male, with four women and twenty-four men.





We welcomed three new students to our graduate program this past year, and graduated eight of our Master's and Doctoral students. Our recent graduates have gone on to secure successful positions in industry and academia.

Name	Position	Organization	Location
Andrew Campbell (MS)	Associate Researcher	Civil & Environmental Engineering, University of Tennessee, Knoxville	Oakland, CA
Reese DuBlois (MS)	Analyst (Junior Engineer)	Transportation Planning & Traffic Operations, Kimley-Horn & Associates	Nashville, TN
Shuguang Ji (PhD)	Postdoctoral Research Associate	Industrial & Information Engineering, University of Tennessee, Knoxville	Knoxville, TN
Ximiao Jiang (PhD)	Graduate Research Scholar	University of Central Florida	Orlando, FL
Ryan Overton (PhD)	Assistant Professor	Reiners Department of Civil & Environmental Engineering, Trine University	Angola, IN
Qiang Yang (PhD)	Special Operations Analyst	Quidsi Inc	Jersey City, NJ

### **Chapter Meetings**

Our chapter is dedicated to providing frequent meetings with high educational value and research relevance. Official chapter meetings occur almost every Thursday during the Spring and Fall semesters and include a guest speaker related to transportation, either coordinated by our transportation faculty or in conjunction with related departments at UT Knoxville. Throughout the school year, we also hosted official meetings for special event planning and competition practices. The following table lists our ITE meetings and includes descriptions of the guest speakers. At each meeting, faculty and student members engaged in discussion of topics presented.

\*We use the dates 2/20/2012 to 2/14/2012 due to the submission dates required by TSITE (mid-February).

DATE	SPEAKER	DESCRIPTION
2/20/2012	Mock Traffic Bowl	The traffic bowl team competed against the other student chapter members in preparation for the TSITE competition.
2/23/2012	Dr. Angel Palomino, UT Knoxville	Dr. Palomino received her Ph.D. from the Georgia Institute of Technology. Her research areas include micro-scale soil mechanics, clay particle surface modification, beneficial uses of coal combustion products, engineered soil materials, and understanding the influence of geogrids in pavement structures.
2/27/2012	Mock Traffic Bowl	The traffic bowl team competed against the other student chapter members in preparation for the TSITE competition.
3/8/2012	Dr. Khalid Alshibli, UT Knoxville	In August of 1998, the Space Sciences Laboratory of NASA/ Marshall Space Flight Center appointed Dr. Alshibli as the Project Scientist for the MGM Microgravity Experiment. Dr Alshibli continued to serve as a Project Scientist at Science Directorate of MSFC until March of 2006.
3/29/2012	Dr. James Mason, UT Knoxville	Prior to joining UTK faculty, Dr. Mason designed bridges for the California Department of Transportation (Caltrans) for 6 years, including the seismic analysis and retrofit design of numerous bridges and associated foundations. While at Caltrans, Mason was jointly responsible for a pile test program in which micropiles made their premier exposure to the greater California market and subsequently nationwide.



DATE	SPEAKER	DESCRIPTION
4/19/2012	Dr. Megan Ryerson, UT Knoxville	Dr. Ryerson's research focus is on the impact of environmental and operational policies on the transportation system, particularly aviation and logistics systems. To support this research, she blends strategic optimization models and econometric models to capture the interaction between policy and transportation operations and infrastructure investments.
8/23/2012	Chapter Meeting	Officer elections.
9/11/2012	Chapter Meeting	Planning for "Engineers Day".
9/13/2012	Dr. Jennifer Retherford, UT Knoxville	"Selection of Design Parameters for Construction of a Surrogate Model for the Mechanistic–Empirical Pavement Design Guide" Reliability analysis based on probabilistic methods for uncertainty quantification implemented within the MEPDG has the potential to provide significant benefits to the highway community, by providing a basis for quantifying the benefits of quality control and quality assurance.
9/20/2012	Bryan White, McGhee Tyson Airport	Mr. White is the Vice President of Engineering and Planning for the McGhee Tyson Airport (TYS) in Knoxville. He discussed airport planning and engineering and the current issues at TYS.
9/27/2012	Dr. May Yuan, University of Oklahoma	"Space, Time, and Patterns of Life" This presentation discusses the ideas of patterns of life and analytics of space-time data to discovery life patterns over a period of time. Analysis of GPS offender monitoring data will be used as an example in the discussion. New space-time analytics methods are being developed on the project to elicit patterns of individuals' movements and implications of their life travel patterns.
10/4/2012	Hongtai Yang	This student chapter member presented his research titled: "Statewide Rural-Urban Bus Travel Demand and Network Evaluation: An Application in Tennessee."
10/18/2012	Dr. John Bell, UT Knoxville	"Transportation and Supply Chain Research Directions." Dr.Bell's teaching and research interests are in logistics and supply chain management, vehicle routing, facility location, supply chain strategy and risk.
10/25/2012	Chapter Meeting	Plan and discuss travel to the TRB meeting.
11/1/2012	Dr. Thomas O'Rourke, Cornell University	"The New Normal for Natural Disasters", 2012 Distinguished Lecture of the Earthquake Engineering Research Institute (EERI) In this talk, O'Rourke will discuss the 2011 earthquake and tsunami in Tohoku, Japan; the 2010 and 2011 earthquakes in the Canterbury region of New Zealand; and Hurricane Katrina. He will also offer examples of critical infrastructures at risk, including earthquake effects on the water supply of Southern California and hurricane effects on New York City. He will explain that the severity and consequences of these extreme events have established a new level of what can be considered "normal" for natural disasters. He will propose that researchers need a new approach to the way the risks are evaluated in such extreme events, and in the way that critical infrastructure is defined and protected.
11/8/2012	Andrew Campbell	This student chapter member presented his thesis research titled "Factors Influencing the Choice of Shared Bicycles and Electric Bicycles in Beijing - A Stated Preference Approach."
11/29/2012	Dr. Huyn Kim, UT Knoxville	"Vulnerability of Hub Networks: Spatial Analysis and Modeling." Dr.Kim's research interests center on transportation, telecommunications, and location analysis using spatial optimization and Geographic Information Science. Specifically, his current research topics include reliable hub location problems and network survivability of



DATE	SPEAKER	DESCRIPTION
	-	urban transportation systems.
1/24/2013	Dr. Karen Seto, Yale University	"Rethinking Urbanization and Sustainability: Lessons Learned from China and India" Seto's work in China, Vietnam, and India seeks to determine how urbanization is changing the Earth's surface, what drives urban land change in contemporary Asia, and where will urban expansion occur in the future. She is also investigating the environmental impacts of urban expansion.
1/31/2013	Cortney Mild, CHCRPA	"Taking US Transportation Officials to European Cycling Cities: Does it Matter?" The Bikes Belong Foundation and the Federal Highway Administration sponsored a series of study tours for US transportation professionals to learn about biking infrastructure in European cities. Mild's research studies the impact of these study tours on participants and lessons learned from the tour. Mild is now serving as Membership Specialist for the Chattanooga-Hamilton County Regional Planning Agency.
2/7/2013	Chapter Meeting	Planning for upcoming TSITE activities.
2/14/2013	Chapter Meeting	Chapter members will present highlights from TRB 2013 to the UT Knoxville Center for Transportation Research, ITE students, and Civil Engineering faculty.



### **Future Activities**

Our immediate future plans include the 2013 Traffic Bowl and an outreach activity in March called "Breakfast of Champions." The outreach event is part of an effort to encourage top high schoolers who have been admitted to UT College of Engineering make the choice to attend UT Knoxville in the Fall 2013. ITE Chapter members will showcase the driving simulator to students and their parents. Our long term plans for the next year include planning for Engineers Day 2013 outreach and moving into the new John Tickle Engineering Building on campus in summer 2013.



## **II. Professional Activities**

There were many opportunities to engage with industry this past year. The following section highlights meeting attendance and presentations over the past year.

## **ITE Meetings**



#### Tennessee Section ITE (FEB/ AUG 2012)

Our student chapter attended the 2012 TSITE Winter Meeting at Vanderbilt University in Nashville TN, where we competed in the Traffic Bowl. Member attendees included Amber Woodburn, Hongtai, Yang, Stephanie Hargrove, Reese DuBlois, Jun Liu, Bryan Bartnik, JJ Yang, and James Ensley. Later that year, Amber Woodburn and Hongtai Yang both gave presentations at the 2012 TSITE Summer Meeting in Gatlinburg TN. This was in honor of their awards in the Student Paper Competition, where UT Knoxville's ITE members took first, second, and third place.

#### Southern District ITE (APR 2012)

The Annual SDITE meeting was held in Lexington, Kentucky in April 2012. Our Traffic Bowl team was invited to compete in the William Temple Scholarship Challenge Traffic Bowl. In addition, Qiang Yang, received runner-up in the SDITE student paper contest. The UT Knoxville member attendees included C. Langford, W. Lu, Q. Yang, A. Woodburn, H. Yang, S. Hargrove, R. DuBlois, B. Bartnik, and J. Ensley. Our student members coordinated and participated in multiple social activities with other SDITE attendees, as described in the Social Event section of this report.

### Conferences

#### Transportation Research Board (JAN 2013)

The ITE UT Knoxville student chapter members went to Washington DC to attend the 92nd Transportation Research Board (TRB) annual meeting which was held during January 2013. We rented a few vans to drive together from Knoxville to DC. During the conference, student members attend exhibits, presentation sessions, poster sessions and committee meetings that are closely associated with their study concentration. Six chapter members, listed below, presented their research in either poster sessions, committee meetings and lecture sessions. TRB continues to serve as a great opportunity to showcase our research and network with international peers in the transportation field.

- "North America's first e-bike share: A year of experience." Lectern Presentation (T. Yoon, C. Langford)
- "Emerging Technologies and Vehicles Joint Subcommittee. Safety of e-bike and bicycle users in an on-campus ebike sharing system: Early findings" Committee Meeting Presentation (C. Langford



- "Exploring Real-Time Applications of License Plate Recognition Technology for Tracking Commercial Vehicles" Poster Session (S. Hargrove)
- "Using Gel Permeation Chromatography to Predict Viscoelastic Properties of Recycled Asphalt Shingle Binder and ITS Use in RAS Blending Efficiency" Poster Session (B. Bowers)
- "Challenges to Air and Rail Alternatives Analysis in Government Environmental Impact Review Processes" Environmental Impacts of Aviation Committee Meeting Presentation (A. Woodburn)
- "Conflict Analysis and Crash Severity Estimation of Four Transportation Modes in China" Poster Presentation (H. Yang)



#### Intelligent Transportation Society of Tennessee Annual Meeting (OCT 2012)

The meeting features presentations on implementation of ITS technologies on projects within the State.

- "Electric bike sharing: System design and user demand" (C. Langford, S Ji)
- "Emergency Evacuation planning with Advanced Traveler Information Systems Where Should we Install ITS Equipment?" (W.Lei)

#### 20th National Conference on Rural Public and Intercity Bus Transportation (OCT 2012)

The conference offers a valuable experience for rural transit and human service transit researchers, practitioners, and anyone who is interested in learning about the latest in best practice and current research in rural public and intercity bus transportation. Hongtai Yang attended this conference in Salt Lake City, Utah.

#### East Tennessee Green Building Council (SEP 2012)

The East TN Green Building Council is a chapter of the US Green Building Council. Meetings are held monthly on different topics related to green building and urban infrastructure. The Electric Vehicles and Urban Infrastructure meeting included presentations from EV owners in the area, organizations focusing on EV charging stations, and a presentation from two student members (C. Langford, S Ji). They presented their work titled "Electric Vehicles and Urban Infrastructure Meeting. Sharing electric bicycles at the University of Tennessee, Knoxville."

#### Velo-City Global (JUN 2012)

Velo-city is widely considered a premier international cycling planning conference series. The conference, hosted in Vancouver, BC, expects to draw 1,500 attendees, bringing together those in involved in policy, promotion and provision of cycling facilities and programs. Two student members (C. Langford, T. Yoon) presented their work titled "Electric bike sharing: Observations from the first nine months of a university pilot test."

#### International Conference on Research in Air Transportation (MAY 2012)

ICRAT has now been established as a mainstream biennial event in Air Transport Research, alternating with the USA/Europe Air Traffic Management (ATM) Research and Development (R&D) Seminar. Student presenters were able to present their research problems and get advice from established scientists in the field during a doctoral symposium. Two members, listed below, presented their work at the conference in Berkeley, CA.

- "Real World Turboprop Market Viability: New Turboprop Markets for Alaska Airlines" (A. Campbell)
- "Modeling Aircraft Performance: A Comparison of PIANO and Airline Fuel Consumption" (A. Woodburn)



#### **Other Presentations**

- May 2012 Presentation: "Geographic Data Analysis for Advanced Traffic System with High Performance Computing" UCGIS 2012 Symposium, Washington DC (W. Lu)
- Aug 2012 Presentation: "The Factors Influencing the Choice to use Bikeshare in Beijing" Seminar, Tsinghua University, Beijing China (A. Campbell)
- Sep 2012 Presentation: "The results of the B/C Study for TDOT's HELP Trucks" TDOT Incident Management Conference (S. Hargrove)
- Oct 2012 Presentation: "What Is the Role of Public Bikes and Electric Bikes in Beijing? A Stated Preference Approach" UC Berkeley SAFETREC Seminar, Berkeley CA, http://safetrec.berkeley.edu/news/seminar-10-19-campbell.html (A. Campbell)

## Field Trips

#### Delta Air Lines (SEP 2012)

Three chapter members and faculty advisor, Dr Megan Ryerson, had the opportunity to travel to Atlanta, Georgia in September 2012 to tour Delta Air Lines facilities and meet with aviation professionals. Students and faculty from the University of California, Berkeley and the University of Maryland joined the group. Our chapter members had the opportunity to train in a hydraulic flight simulator, tour Delta's extensive aircraft maintenance facilities, visit with dispatchers in Delta's command center, and explore the Air Traffic Control Tower and Ramp Tower at the Atlanta Hartsfield Jackson Airport. Students also met with Delta professionals who make major operational decisions for the airline.



#### Center For Transportation Research (SEP 2012)

Center for Transportation Research (CTR) celebrated their 40th Anniversary on 09/06/2012. I went to this event to celebrate the 40<sup>th</sup> Anniversary for Center for Transportation Research of University of Tennessee, Knoxville. National, state, and local transportation officials, former and current directors, staff members, students, friends and associates went to the meeting to celebrate the history and future of CTR. Notable speakers and attendees included: TDOT Commissioner John Schroer, Knoxville Regional TPO Director Jeff Welch, Center Director David Clarke, University of Tennessee Chancellor Jimmy Cheek, and Dean of College of Engineering Wayne Davis.

#### Tennessee Department of Transportation (NOV 2012)

The student chapter visited the Region 1 office of the Tennessee Department of Transportation. Students learned about design work processes from state transportation officials.

### **Student Publications**

- "The Influence Of Curbs On Driver Behaviors In Four-Lane Rural Highways A Driving Simulator Based Study" (Q. Yang) Published In <u>Accident Analysis And Prevention</u>
- "Transitioning A Bus Transit Fleet To Hydrogen Fuel: A Case Study Of Knoxville Area Transit" (C. Langford) Published In <u>International Journal Of Hydrogen Energy</u> In Feb 2012



- \*Statewide Rural-Urban Bus Travel Demand And Network Evaluation: An Application In Tennessee" (H. Yang)– Published In Journal Of Public Transportation In Oct 2012
- "Performance Analysis Of Vehicular Ad Hoc Networks In Taxi Systems," <u>Proceeding Of The 18th Intelligent</u> <u>Transportation Systems World Congress</u>, Orlando, United States, 2011. Indexed By Tris Database, (W. Lu) Oct – Available Online In 2012
- "Challenges To Air And Rail Alternatives Analysis In Government Environmental Impact Review Processes" (A. Woodburn) Accepted To <u>Transportation Research Record</u> In Feb 2013
- "North America's First E-Bike Share: A Year Of Experience" (C. Langford) Accepted To <u>Transportation Research</u> <u>Record</u> In Feb 2013

#### Student Awards

DATE	AWARD	AGENCY	RECIPIENT
Jan 2012	John Harper Memorial Scholarship	American Society of Civil Engineers	A. Foster
Feb 2012	1 <sup>st</sup> place, TN Traffic Bowl,	Tennessee Section Institute of Transportation Engineers	H.Yang, A. Woodburn, J. Yang, B. Bartnik
Apr 2012	East Asia and Pacific Summer Institutes Fellowship		
Apr 2012	Travel Award for the Four Candidate Best Papers of UCGIS 2012 Symposium	University Consortium for Geographic Information Science	Wei Lu
May 2012	W.K. McClure Scholarship for the Study of World Affairs	UT Knoxville	A. Campbell
Aug 2012	Dwight D. Eisenhower Fellowship	Federal Highway Administration	S. Hargrove
Aug 2012	Dwight D. Eisenhower Fellowship	Federal Highway Administration	B. Bowers
Aug 2012	3 <sup>rd</sup> place, Student Paper Competition	Tennessee Section Institute of Transportation Engineers	H. Yang
Aug 2012	2 <sup>nd</sup> place, Student Paper Competition	Tennessee Section Institute of Transportation Engineers	Q. Yang
Aug 2012	2 <sup>nd</sup> place, Student Paper Competition	Southern District Institute of Transportation Engineers	Q. Yang
Aug 2012	1 <sup>st</sup> place, Student Paper Competition	Tennessee Section Institute of Transportation Engineers	A. Woodburn
Aug 2012	Graduate Research Award Program on Public Sector Aviation Issues	Airport Cooperative Research Program	A. Woodburn
Oct 2012	1 <sup>st</sup> place, Poster Session Award for Outstanding Presentation and Academic Qualifications	Intelligent Transportation Society Tennessee	C. Langford, S. Ji
Dec 2012	Helene M. Overly Memorial	Women's transportation seminar	S. Hargrove
Jan 2013	Travel Award	UT Knoxville Graduate Student Senate	C. Langford, T. Yoon, H. Yang









## III. Traffic Bowl

## **TSITE Traffic Bowl (2012)**

The four member team met weekly in the months leading up to the TSITE winter meeting in Nashville. Each team member was assigned a different transportation resource to study and prepared detailed notes. These notes were taught to other members and expanded upon as the TSITE meeting approached. A week before the meeting, the UTK ITE student chapter held a mock traffic bowl pitting the four team members against the rest of the ITE student members. The traffic bowl team had a resounding victory and was ready for the competition at TSITE.

The competition at TSITE began with a dismal first round. Vanderbilt led with 500 points while UTK and Memphis both had 0 points. The second round, however, went much better for UTK who went on to win with 3,900 points compared to Vanderbilt's 100 and University of Memphis' -500.

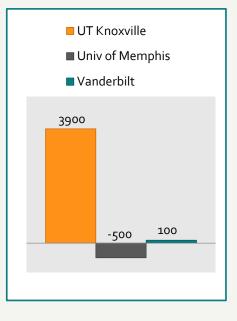
## SDITE Traffic Bowl (2012)

Following the victory at TSITE, the team began preparing for the competition at the SDITE meeting in Lexington, KY. Team members met twice a week and students and professors would quiz team members at random, helping to keep them prepared. In the first round of the competition at SDITE, UTK faced Clemson and the University of Kentucky. After a hard fought match, and a near comeback, UTK fell to Clemson by 101 points as Clemson finished with 5,700 and UTK finished with 5,599. Even with a narrow defeat, UTK finished with one of the highest scores at SDITE Traffic Bowl. All in all, the UTK Traffic Bowl team had a great time studying, working together, and experiencing the competitions at both the TSITE and SDITE meetings.

#### TSITE TRAFFIC BOWL SCORES

#### **TEAM MEMBERS**

Role	Name
TEAM CAPTAIN	Amber Woodburn
COMPETITOR	Bryan Bartnik
COMPETITOR	Hongtai Yang
ALTERNATE	Jianjiang Yang





## IV. Community Outreach

Students in UT Knoxville's ITE chapter are committed to service in our communities. We engage youth in engineering outreach efforts, partner with other student groups, and participate in university committee's to inspire interest in transportation engineering.

## **Engineers Day**



Engineers Day is held each October at the University of Tennessee and is an opportunity for potential engineering students from high schools in the area to interact with current engineering students and learn about different fields of engineering. In 2012, nearly 1,200 students from 55 high schools attended the event. Each year, ITE has an exhibit to display current research initiatives and to provide general information on transportation engineering. Students were greeted by ITE members with a brief introduction to the field of transportation engineering as they arrive at the exhibit and were provided handouts about careers in transportation engineering. This year's ITE exhibit included three interactive displays and two games. The three displays included: (1) an electric

### CAN YOU SOLVE THE ENGINEERS DAY RIDDLES?

"When you burn carbohydrates, instead of hydrocarbons, my metal 'U' will guard your steed until your business is done. What am I?"

"A stream flows beneath me, though water isn't near. Four legs are too heavy, a weight I cannot bear. What am I?"

"Up the hill, along the road. Stay here and I know you need a ride. One long vehicle you will board, you will wait with me until it arrives. What am I?"

"I have a wheel, but do not roll. I am blue, but not sad. I'm reserved for a few. My symbol they must have. What am I?"

bicycle used in UT Knoxville's electric bicycle sharing project called "Cycle U Share," (2) allowing the high schoolers to use UT Knoxville's driving simulator for a short period of time, and (3) a real-time license plate recognition display which allowed students to try to 'outsmart' the technology by racing license plates down the hallways. This year we also introduced two games to the exhibit area and offered \$20 awards to students who did the best. The first game involved design of a paper aircraft, for which the three farthest flying aircraft to land on our makeshift runway received an award. For the second game, ITE members designed a riddle scavenger hunt. Students were provided four riddles (shown above) and asked to take a picture of the transportation infrastructure on the UT Knoxville campus. Those who solved the riddles received an award. Our exhibit was awarded third place out of all engineering organization exhibits at Engineers Day.



## EarthFest



On April 21, 2012 two students ITE members (Casey Langford and Taekwan Yoon) and Assistant Professor Dr. Chris Cherry attended Knoxville's 12th annual Earth Day event, EarthFest 2012. EarthFest is a 'zero-waste' event that promotes environmental awareness and activities for individuals to reduce their environmental footprint on the East Tennessee area. The event was held at Pellissippi State Community College and was free to the public, with free food for attendees. This year's event focused on the green economy. Employers, educators, and others who contribute to the green economy presented their work. The event showcased "going green" job creation, non-profit activities, sustainable community development, global ramifications of local decision-making, and "green" educational programs. An exhibit area included numerous displays focused on technology for environmentally conscious lifestyles and a kid's area with interactive exhibits and events. The students from UT displayed

electric bicycles (e-bikes) used in a new on-campus e-bike sharing system, CycleUshare. They also presented information about the bike-sharing project and how the technology presented a 'green' transportation alternative for students and faculty at the University. As part of the event, our exhibit included a trivia question for young attendees related to the cost of making a typical trip using e-bikes versus a person automobile.

### **Facebook Launch**



To assist with future outreach efforts, we launched a facebook page to represent our student chapter. The page is facilitated by the graduate and undergraduate students and built for the broader community to interact with young transportation professionals, receive updates about UTK ITE outreach programs, share your experiences related to UTK ITE activities, and learn about interesting transportation issues in Knoxville and beyond. The page also facilitates the sharing of resources and information between ITE members. We can be found at "BigOrangeITE." Like us and learn!

## **Campus Leadership**

Our members also participate in UT Knoxville campus events and organizations. Over the last year our members:

- Served on the UT Knoxville's Traffic and Parking Authority Committee as a graduate student representative.
- A Participated in the Alternative Transportation Working Group to promote a multi-modal campus community.
- A Held leadership positions in the UT Knoxville Korean Student Association.
- Participated as a panel member with the Society of Women Engineers outreach effort at Hardin Valley STEM Academy to encourage young women to pursue engineering.
- A Was a guest speaker as UT Knoxville's American Society of Civil Engineers meeting to promote graduate studies.
- Raised money for local charities via organized 5k racing events.
- A Managed an informational booth at the UTK Go Green Fair with leading environmental organizations on campus.



## V. Social Events

Throughout the school year, we organize group dinners at our favorite local bars and restaurants. At least once a month we meet at Copper Cellar, Cool Beans, or Sunspot to unwind from our research and catch up on eachother's lives. We also try to coordinate outdoor activities to stay active, especially during the Spring and Summer semesters.

## Sand Volleyball

We joined the intramural league for Sand Volleyball at the University Recreation Center. We practiced and played every week for 1-4 hours, enjoying the sun and time away from computer screens. Few members were familiar with volleyball rules, so this was a fun, athletic activity that allowed us to learn together and have a few laughs.

We spent a summer day in 2012 with a marathon of sand volleyball and a Korean barbeque potluck at ITE member, Taekwan Yoon's apartment. Taekwan's parents were the guests of honor as we celebrated their first visit to Tennessee from Korea.



## **Overton Family Farm**

One of our members, Ryan Overton, invited ITE to visit his family farm in Speedwell, TN to celebrate his birthday in summer 2012. Ryan and his wife, Ashley, prepared delicious food and students brought dishes that reflected their heritage. Everyone enjoyed the beautiful summer day. For many of us, this was the first time we had experienced farm life. Ryan gave a tour of the farm equipment and introduced us to the animals at his farm, with his horse, Hawk, stealing the limelight.





## **Bourbon Trail**

The SDITE professional meeting in April 2012 was a great balance of work and play for the ITE chapter members. We enjoyed the official SDITE dinner at the Red Mile Kentucky Harness Racing Track and also scheduled time to experience Lexington night life and visit the Buffalo Trace Distillery. Chapter members took initiative to involve students from other Southern District schools to increase camaraderie amongst the Traffic Bowl competitors.







# Student Membership Roster

Aptil 1, 2012 to March 31, 2013

NAME	DEGREE	GRADUATION	ITE INTL MEMBER?
PERRY BARKER	MS	Spring 2012	
BRYAN BARTNIK	MS	Spring 2013	Yes
BENJAMIN BOWERS	PhD	Fall 2013	
ANDREW CAMPBELL	MS	Fall 2012	
REESE DUBLOIS	MS	Fall 2012	Yes
JAMES ENSLEY	MS	Fall 2012	Yes
ALLYSON FOSTER	BS	Fall 2012	
	MS	Spring 2014	
STEPHANIE HARGROVE	PhD	Fall 2013	Yes
SHUGUANG JI	PhD	Summer 2012	
XIMIAO JIANG	PhD	Fall 2012	
CASEY LANGFORD	PhD	Summer 2013	Yes
WEI LU	PhD	Summer 2013	
JUN LIU	PhD	Spring 2015	Yes
SAM MOSS	MS	Spring 2012	
VIJAY NARAPSETTY	MBA	Fall 2012	
	PhD	Fall 2013	
CLEMENT OIGBOKIE	BS	Fall 2012	
RYAN OVERTON	PhD	Summer 2012	
ZANE PANNELL	MS	Summer 2013	Yes
SHANNA VEILLEUX	MS	Spring 2013	Yes
LUIS VENEGAS	BS	Spring 2013	
RICK WHEELER	MBA/MS	Fall 2014	Yes
AMBER WOODBURN	PhD	Spring 2015	Yes
HONGTAI YANG	PhD	Summer 2013	Yes
JIANJIANG (JJ) YANG	PhD	Spring 2015	Yes
QIANG YANG	PhD	Spring 2012	
TAEKWAN YOON	PhD	Spring 2014	
SHENG ZHAU	PhD	Spring 2014	
CHANGJUN ZHOU	PhD	Spring 2013	
TOTAL STUDENTS	28		