



SUMMER 2016 RESEARCH EXPERIENCE FOR UNDERGRADUATES (REU)

Organizational Background:

The Office of the Assistant Secretary of Transportation for Research and Technology (OST-R) within the US Department of Transportation (USDOT) awarded, in the fall of 2013, a grant to establish the University Transportation Center for Railway Safety (UTCRS). The Center for Railway Safety, which is headquartered at the University of Texas Rio Grande Valley (UTRGV), operates as a consortium with the Texas A&M Transportation Institute (TTI) and the University of Nebraska Transportation Center (NTC).

The UTCRS aims to reduce the number of accidents and equipment failures experienced in rail transportation systems. This will result directly in reduced fatalities and injuries in addition to reduced economic losses to stakeholders. New technology and associated workforce development will lead to improved safety assessments, safety counter measures, decision-making tools, and greater long-term safety gains. With these goals in mind, the UTCRS offers the following summer research experience opportunity:

Research Experience Details:

The UTCRS will provide undergraduate engineering students the opportunity to participate in a research-intensive ten-week program. Selected applicants for this program will work closely with faculty members, graduate students, and undergraduate mentors on current research projects, prepare professional presentations to their peers during program meetings, make a formal poster presentation of their research experience at the end of the program, and submit a written, final report describing the results of their research.

Duration: Ten Weeks

May 31, 2016 – August 5, 2016

Financial Support:

The UTCRS will provide the selected summer research interns a \$6,000 program stipend (\$600/week) to cover living expenses, and will reimburse up to \$500 in travel expenses.

To apply:

If you are an engineering student, at any of the above consortium member institutions, interested in participating in this rewarding and educational opportunity, you must submit a complete application packet by the specified deadline. See application for detailed submission instructions.





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University Transportation Center for Railway Safety (UTCRS)

Applicant Information

Last Name: _____

First Name: _____

Home Address: _____

City/Zip: _____

Email Address: _____

Phone No: _____

Alternate No: _____

Citizenship: U.S. Citizen or Permanent Resident

By checking this box you certify that you are a U.S. Citizen or Permanent Resident

Academic Information

Student ID Number: _____

Grade Point Average _____

Academic Major (1) _____

Major (2) or Minor _____

Anticipated Graduation Date: _____



Statement of Purpose and Career Goals:

Why are you interested in a summer research experience within the UTCRS consortium?

What specific skill-set do you hope to gain through this summer research experience?

Describe your long-term career goals and how this experience will help you achieve these goals?

Upon completion of your undergraduate studies, do you plan to apply to graduate school, enter a profession, or other? Give specific details.

Where did you learn about this UTCRS Research Experience for Undergraduates opportunity?

- UTCRS Website
- Professor
- Fellow student
- Poster Board Presentation/Brochure
- Other (Specify): _____

Professional References

Name	Phone Number	E-mail	Relationship
1.			
2.			
3.			

Research Interest

Participants in the REU program will collaborate with faculty, students, and staff of the consortium universities on ongoing research in the field of railway safety and, more importantly, will gain a better understanding of the role STEM plays in modern society. This collaboration is established to foster an intellectual climate and physical environment capable of supporting the increasing need to improve safety and reduce risk on the multi-modal transportation system.

- Structural Analysis
- Materials Engineering
- Transportation System Operations
- Multimodal Transportation
- Intelligent Transportation Systems
- Railway Safety Research
- High Speed Railway
- Movement of Hazardous Materials
- Evaluation of Innovative Technologies
- Railway-Highway Grade Crossing

From the topics listed in bullets, list the top four research areas of interest to you, in the order of preference (with 1 being your first choice). Should you be awarded a summer research internship, every effort will be made to place you in one of your preferred research areas.

- (1)
- (2)
- (3)
- (4)



Research Institution

The UTCRS consortium is comprised of three universities. Should you be awarded a summer research internship, would you be willing to travel to:

University of Texas Rio Grande Valley (UTRGV), Edinburg, Texas	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Texas A & M University (TAMU), College Station, Texas	<input type="checkbox"/> YES	<input type="checkbox"/> NO
University of Nebraska-Lincoln (UNL), Lincoln, Nebraska	<input type="checkbox"/> YES	<input type="checkbox"/> NO

Disclaimer and Signature

I certify that all the information I provided in this application is accurate and complete to the best of my knowledge. If this application leads to an internship assignment, I understand that false or misleading information in my application may result in the forfeiture of this Research Experience for Undergraduates (REU).

Signature:

Date:

A complete application packet should be emailed to railwaysafety@utrgv.edu, which consists of one PDF file that contains the following, in the exact order as they appear below:

- 1) A completed and signed application form,
- 2) Your current resumé,
- 3) One letter of recommendation from one of your professional reference; and
- 4) Your official transcript. You can use your unofficial transcript for submitting your PDF application file but you must have the *Office of the Registrar* mail a current official transcript on your behalf to:

University Transportation Center for Railway Safety (UTCRS)

College of Engineering & Computer Science
University of Texas Rio Grande Valley (UTRGV)
ENGR Portable 1.100
1201 W. University Drive
Edinburg, TX 78539-2999

