SAFER-SIM Excellence Award Graduate Winners

One student from each of the SAFER-SIM Institutes was awarded our Excellence Award, who have the following:

- Received financial support from the UTC program for at least two semesters prior to receiving the award
- Completed with a grade of B or better at least 12 hours of graduate course work at the time the selection is made and have a graduate GPA in excess of 3.25 (out of 4.00).
- Displayed accomplishments in the 3 following areas:
  - Technical Merit and Research Capability
  - Academic Performance
  - Leadership

Shile Zhang – University of Central Florida

“[Ms. Zhang] is currently pursuing a PhD in Transportation Engineering at UCF. Her current course work includes Transportation, Computer Science, Smart Cities and Statistics courses... she’s always been motivated to apply the advanced techniques in the transportation field. One of our projects was using smartphone embedded sensors and multiple external equipment to improve pedestrian safety. She used a real-time object detection model YOLO, which was an automated object detection model, to detect the pedestrians’ presence from a web camera. Her work was fulfilled with the field tests successfully carried out. In another project designing Smart Garages, she used a Raspberry Pi, a microcomputer to detect vehicles in the UCF garages. She also took part in the competition “Solving for Safety Visualization Challenge” sponsored by the U.S. Department of Transportation, in which our team
won the first-place award. Meanwhile, she has been taking classes in statistics and computer science. In most of the classes, she achieved “A” grades. Through these courses, she acquires some programming languages, such as SAS, R, and Python. Using the computer vision techniques and deep learning models, she wrote a paper that was accepted in the journal of the Transportation Research Record during her 2nd year at UCF. The study is mainly about predicting the pedestrians’ jaywalking behavior to reduce pedestrians-related collisions. Besides, she has two papers submitted to the journal of Accident Analysis and Prevention in which one is accepted and the other currently under peer review.”

Jeehan Malik – University of Iowa

“First, Jeehan has proven that she is a strong researcher in answering research questions through both quantitative and qualitative evaluations. Jeehan has completed a large-scale quantitative evaluation that will impact the field of Vehicle to Pedestrian (V2P) communication. Further, she has matured experience in conducting qualitative analysis both in analyzing the perceptions of V2P communication via smartphones and in analyzing the sentiments of people with visual impairments toward anonymously sourced artwork descriptions from online workers. Also, Jeehan is a technical leader, demonstrated by presentations at multiple conferences and spearheading a program at her undergraduate institution that empowers women in computing.”

Katerina Deliani – University of Massachusetts

“Katerina is a leader, a team player, and a hard-working individual who is also fun to work with. She has managed to maintain an impressive GPA of 3.77/4.00 in her courses while performing original research,
working in multiple research projects, and leading campus student organizations. Katerina’s critical thinking and the insights she brings to my research group have been invaluable. She has a unique ability to do innovative and challenging basic research while recognizing the implications that her work has in practice. Her ability to work on multiple projects at the same time is also exceptional. Since starting her graduate studies at UMass, Katerina has worked on six different demanding sponsored research projects, five of which she was leading the effort for, and has published 2 journal papers and four conference papers. The projects she has been involved in cover a wide spectrum of topics ranging from review of zero emission bus technologies and implementations to human factors research and algorithmic calibration of an agent-based simulation model and require diverse skillsets. Through these projects she has demonstrated that she can effectively work with multidisciplinary teams including engineering, human factors, and public health professionals. Katerina’s independence, adaptability, and persistence in identifying appropriate methods, solutions, and tools has been impressive. Katerina is passionate about improving safety for multimodal operations, which is also reflected in her PhD dissertation topic. Her dissertation research is focused on understanding the interactions of bicyclists with motorized vehicles both through field and simulation experiments. She is particularly interested in how these interactions differ under the presence of various bicycle-specific treatments such as protected bike lanes and conventional bike lanes.”

---

**Hiba Nassereddine – University of Wisconsin-Madison**

“Hiba is currently a transportation engineering graduate student in Civil and Environmental Engineering at the University of Wisconsin-Madison. Hiba has also been a teaching assistant with me in CEE 370 and of course has been a researcher in my Traffic Operations and Safety (TOPS) Laboratory. Hiba has been instrumental in the success of several SAFER-SIM research projects and has been financially supported for more than two semesters. On top of her efforts in transportation engineering, Hiba selected and completed extra coursework to obtain a M.S. degree in Computer Science. She is now extremely active in technical writing, recently publishing her first journal paper. Hiba was recognized for her research and publication efforts by her selection for the best poster presentation award at the 2019 American Society of Civil Engineers (ASCE) International Conference of the Transportation and Development Institute (T&DI) and best poster award at our 2018 SAFER-SIM symposium. My observation of Hiba tells me that she is capable of excelling at most any task and combines natural talent with maturity and leadership. She demonstrates intellectual ability and solid professional judgment, her communication skills are extremely strong, and she is a leader amongst her peers.”