

Hany Hassan, Ph.D., P.E.

CURRENT POSITION

Associate Professor in Transportation Engineering Director of Graduate Programs

(Aug. 2025-Present) (Jan. 2025-Present)

3255 D Patrick F. Taylor Hall,

Department of Civil and Environmental Engineering Louisiana State University, Baton Rouge, LA 70803

Phone: (225) 578-6588 Email: hassan1@lsu.edu

https://www.lsu.edu/eng/cee/people/hanyhassan.php

http://scholar.google.ae/citations?user=NTpYt3oAAAAJ&hl=en

https://orcid.org/0000-0002-3255-7474



PROFESSIONAL PROFILE

- A registered professional engineer in the state of Louisiana (PE.00447750).
- Self-motivated and highly skilled professional in Transportation Engineering
- Over 15 years of experience in Academia (teaching and research) through working as graduate research assistant, post-doctoral/ senior researcher, and assistant professor in Transportation Engineering
- Over 10 years of industrial experience through working as a transportation engineer as well as projects' manager in several transportation firms.
- Experienced in managing numerous road design projects, traffic impact studies and ITS projects.
- Experienced in managing many funded research projects.
- Handling Editor of the journal of Transportation Research Record.
- Member and paper review coordinator for TRB's standing Committee on Intelligent Transportation Systems (ACP 15).
- Member and paper review coordinator for the TRB's Standing Committee on Human Factors of Infrastructure Design and Operations (ACH40).

EDUCATION

University of Central Florida

Orlando, USA

Doctor of Philosophy in Civil Engineering (Transportation)

August 2011

Dissertation: Improving Traffic Safety and Driver Behavior in Reduced Visibility Conditions

Ain Shams University

Cairo, Egypt

Master of Science in Civil Engineering (Transportation)
Dissertation: *Environmentally Oriented Road Design*

September 2005

Ain Shams University

Cairo, Egypt

Bachelor of Science in Civil Engineering (Grade: Distinction with honor)

June 2000

Graduation Rank: No. 4 out of 225 students

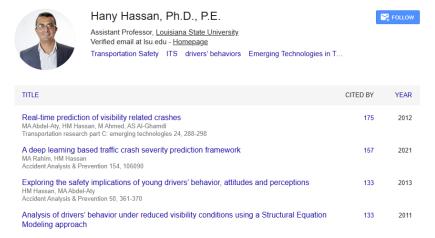
Graduation Project: Highway and Airport Engineering Project (Grade: Distinction)

RESEARCH INTERESTS

Traffic Safety, Smart/Intelligent Transportation Systems, Emerging Technologies in Transportation Engineering (connected and autonomous vehicles, smart cities), Highway Geometric Design, Human factors and drivers' behaviors, Traffic Operation and Simulation, and Statistical Applications in Transportation Engineering.

GOOGLE SCHOLAR

According to my google scholar, my work has been cited more than 1400 times to date by other researchers (my h-index is 18 and my i10-index is 21). More details can be found at my google scholar profile, which is located at: https://scholar.google.ae/citations?user=NTpYt3oAAAAJ&hl=en





PROFESSIONAL MEMBERSHIPS

(1) Professional Engineer (PE.0047750), Louisiana, USA

April 2023 – Present

(2) Handling Editor of the Journal of Transportation Research Record

Dec. 2020 - Present

- (3) Member & papers review coordinator, TRB Committee on Intelligent Transportation Systems, ACP15 Aug. 2019 June 2025
- (4) Member & papers review coordinator, TRB Standing committee on Human Factors of Infrastructure Design and Operation, ACH40 Aug. 2020 June 2025
- (5) Member in TRB Standing committee on Users Information Systems, AND20

Jan. 2010 – Jul. 2019

(6) Faculty advisor for the Institute of Transportation Engineers (ITE) student chapter at LSU.

Aug. 2019-Present

(7) American Society of Highway Engineers (ASHE), Vice President Aug. 2008 – Aug. 2011

(8) The Institute of Transportation Engineers (ITE), UCF

Aug. 2009 - Aug. 2011

(9) Graduate Student Association (GSA), UCF

Aug. 2010 - Aug. 2011

ACADEMIC HONORS AND AWARDS

- Chairman's Award from the TRB Intelligent Transportation Systems Committee (ACP15) for my exceptional service and leadership as the Chair of the Paper Review Team, January 2024.
- Certificate of Appreciation from the TRB Committee on Human Factors of Infrastructure Design and Operation (ACH40) in recognition of outstanding efforts to organize and conduct the technical paper review process for the committee, January 2023.
- Certificate of Excellence in Teaching to certify completion of the May 2023 Communication Intense (C-I) Teaching Lab for Experienced C-I teachers, Louisiana State University, May 2023.
- Certificate of Appreciation, for contributing towards the success of the 4th International Road Federation Asia-Pacific Regional Congress, from the organizing committee, Malaysia, October 2022.
- Certificate of Excellence in Teaching to certify completion of the May 2021 Communication Intense (C-I) Teaching Lab, Louisiana State University, May 2021.
- Nominee, the Civil department level award for outstanding Ph.D. dissertation, Faculty of Engineering, University of Central Florida, USA, October 28, 2011
- Recipient, Arab American Community Center Endowed Scholarship, Orlando, March 2011
- Recipient, the Intelligent Transportation Society of Florida scholarship (the Anne S. Brewer Scholarship), one of three recipients on the state level, December 2009
- Recipient, the American society of Highway Engineers (ASHE) scholarship, April 2009
- Nominee, the college level award for outstanding M.Sc. dissertation, Faculty of Engineering, Ain Shams University, Cairo, Egypt, 2005

SUMMARY OF ACADEMIC EXPERIENCE

| Aug. 2025– Present | Associate Professor in Transportation Engineering, Department of Civil and Environmental Engineering, Louisiana State University, Baton Rouge, LA, USA |
|-----------------------|---|
| Jan. 2025 – Present | Graduate Program Advisor, Department of Civil and Environmental Engineering, Louisiana State University, Baton Rouge, LA, USA |
| Aug. 2019 – July 2025 | Assistant Professor in Transportation Engineering, Department of Civil and Environmental Engineering, Louisiana State University, Baton Rouge, LA, USA |
| Apr. 2018 – July 2019 | Senior Researcher in Transportation Engineering, McMaster Institute for Transportation and Logistics (MITL), McMaster University, Hamilton, ON, Canada. |
| Oct. 2011 – Sep. 2013 | Assistant Professor in Transportation Engineering, Civil Engineering Department, King Saud University, Riyadh, Saudi Arabia. |

| Aug. 2008 – Aug. 2011 | Graduate Research Assistant / Ph.D. Candidate, Department of Civil, Environmental and Construction Engineering, University of Central Florida, Orlando, FL, USA. |
|-----------------------|--|
| Mar. 2002 – Jul. 2008 | Assistant lecturer in Highway Engineering, Department of Civil Engineering, Ain Shams University, Cairo, Egypt. |

SUMMARY OF INDUSTRIAL EXPERIENCE

| Oct. 2013- March 2018 | Senior Transportation Engineer / Projects manager, | | | | | | | |
|-----------------------|--|--|--|--|--|--|--|--|
| | Department of traffic engineering and road safety, Abu Dhabi | | | | | | | |
| | Police / TATWEER for Traffic Assets & Systems Operation and | | | | | | | |
| | Management L.L.C, Abu Dhabi, UAE | | | | | | | |
| Dec. 2006 – Jul. 2008 | Highway Design Engineer, Transportation Engineering | | | | | | | |
| Dec. 2000 – Jul. 2000 | Department, Dar Al-Handasah (Shair and partners) Company, | | | | | | | |
| | | | | | | | | |
| | Cairo, Egypt | | | | | | | |

FUNDED RESEARCH PROJECTS

Ongoing funded projects

(LSU Project Credit = LSU PC)

1. Ground-in Edge and Centerline Rumble Strip Evaluation and Best Practice

Funding Agency: Louisiana Department of Transportation and Development (LADOTD).

Investigators: PI: Hany Hassan Hany Hassan LSU PC = 100% credit Project Period: 05/2024 – 04/2026

2. Trip Generation for Various Sites

Funding Agency: Louisiana Department of Transportation and Development (LADOTD). Investigators: PI: Rebecca Bian (LTRC), Co-PI: Hany Hassan, Consultant: Peter Stopher.

Hany Hassan LSU PC = 100% credit Project Period: 01/2024 - 04/2026

Completed funded projects

(LSU Project Credit = LSU PC)

1. Maximizing the positive impacts of truck platooning on US highways

Funding Agency: Louisiana Board of Regents (BOR)

PI: Hany Hassan (LSU PC = 100% credit)

Project Period: 06/2022 – 06/2025

2. Safety and Traffic Operations at Cloverleaf Interchanges

Funding Agency: Louisiana Department of Transportation and Development (LADOTD).

Investigators: PI: Hany Hassan Hany Hassan LSU PC = 100% credit Project Period: 08/2022 – 07/2024

3. Development of Statewide Design Guidelines for Improving Pedestrian Safety on High-Speed Arterials in Louisiana

Funding Agency: Louisiana Department of Transportation and Development (LADOTD). Investigators: PI: Hany Hassan, Co-PI: Priscilla Tobias (ARORA and ASSOCIATES, P.C.).

Hany Hassan LSU PC = 100% credit Project Period: 10/2022 - 03/2024

4. Examining drivers' behaviors to connected and automated vehicles

Funding Agency: US Department of Transportation / The Transportation Consortium of

South-Central States

Investigators: PI: Hany Hassan Hany Hassan LSU PC = 100% credit Project Period: 08/2021 – 02/2023

5. Vehicle to Infrastructure (V2I) and Vehicle to Vehicle (V2V) passenger and freight vehicle applications to enhance safety and efficiency in coastal evacuations.

Funding Agency: USDOT Tier 1 University Transportation Center, Maritime

Transportation · Research and Education Center, University of Arkansas.

Investigators: PI: Brian Wolshon, Co-PI: Hany Hassan

Hany Hassan LSU PC = 50% credit

Submission Year: 2022; Project Period: 08/2022 – 07/2023

6. Minimum Intersection Illumination

Funding Agency: Louisiana Department of Transportation and Development (LADOTD).

Investigators: PI: Hany Hassan Hany Hassan LSU PC = 100% credit Project Period: 05/2020 – 10/2022

7. Studying the impacts of Vehicle-to-Infrastructure (V2I) technologies on drivers' behaviors and traffic safety

Funding Agency: Louisiana Transportation Research Center (LTRC), TIRE Program

Investigators: PI: Hany Hassan Hany Hassan LSU PC = 100% credit Project Period: 06/2021 – 06/2022

8. Exploring older adults' mobility challenges and preferences before and after COVID-19 pandemic

Funding Agency: US Department of Transportation / The Transportation Consortium of

South-Central States

Investigators: PI: Hany Hassan

Hany Hassan (LSU PC = 100% credit Project Period: 04/2022 - 10/2023

9. Exploring traffic safety problems and challenges of older roads' users in Louisiana: Causes and countermeasures.

Funding Agency: US Department of Transportation / The Transportation Consortium of

South-Central States

Investigators: PI: Hany Hassan

Hany Hassan (LSU PC = 100% credit Project Period: 08/2020 – 02/2022

10. Developing Notification and Enforcement Systems to Communicate and Administer Bridge Load Postings

Funding Agency: US Department of Transportation / The Transportation Consortium of

South-Central States

Investigators: PI: Hany Hassan Hany Hassan LSU PC = 100% credit Project Period: 08/2020 – 02/2022

11. Investigating the Impacts of Truck Platooning on Transportation Infrastructure in the South-Central

Funding Agency: US Department of Transportation / The Transportation Consortium of

South-Central States

Investigators: PI: Hany Hassan, Co-PI: Samer Dessouky (The University of Texas at San

Antonio), Co-PI: Alireza Talebpour (The University of Illinois Urban-Champaign).

Hany Hassan LSU PC = 100% credit Project Period: 08/2019 - 02/2021

12. Real-Time Work Zone Traffic Management via Unmanned Air Vehicles

Funding Agency: US Department of Transportation / The Transportation Consortium of South-Central States

Investigators: PI: Charles Malveaux, Marcio de Queiroz (Co-PI), Xin Li (Co-PI), Hany

Hassan (Co-PI,), ZeWei He (Co-PI) Hany Hassan LSU PC = 20% credit Project Period: 08/2019 – 02/2021

13. Maintaining the mobility of older Canadians: Examining older adults' preferences and needs for using different transportation modes.

Funding Agency: McMaster Institute for Research on Aging (MIRA), Canada

PI: Saiedeh Razavi, project manager: Hany Hassan.

Project Period: 09/2018 – 08/2019

14. Examining traffic safety challenges of older Pedestrians in Canada.

Funding Agency: Provost Research Excellence, McMaster University, Canada

PI: Saiedeh Razavi, project manager: Hany Hassan.

Project Period: 01/2019 - 12/2019

15. Developing an artificial immune system to control roadway traffic signals and regulate traffic flow in case of emergencies.

Funding Agency: King Abdulaziz City for Science and Technology (KACST), Riyadh.

PI: Saber Darmoul, Co-PI: Hany Hassan.

Project Period: Dec. 2014 to Dec. 2017.

16. Young drivers' safety study

Funding Agency: Florida Department of Transportation, District 5

PI: Mohamed Abdel-Aty, Research Assistant: Hany Hassan.

Project Period: Aug. 2010 to Aug. 2011.

17. Developing an early detection system for reduced visibility from fog/smoke and means to effectively and timely warn drivers

Funding Agency: Florida Department of Transportation,

PI: Mohamed Abdel-Aty, Research Assistant: Hany Hassan.

Project Period: Aug. 2008 to Aug. 2010.

18. Developing an intelligent GIS Traffic Safety Management System (ITSMS) for Abu Dhabi, UAE

Funding Agency: Department of traffic engineering and road safety, Abu Dhabi police.

Hassan's role: Project manager.

Project Period: March 2016 to March 2018.

19. Developing a national transportation tracking system for Hazardous materials' trucks in UAE

Funding Agency: Ministry of Interior, UAE.

Hassan's role: Project manager.

Project Period: Oct. 2015 to Dec. 2017.

20. Design and Project Management Services for Implementation and Operation of a Smart Traffic Management Centre in Abu Dhabi Emirate

Funding Agency: Department of traffic engineering and road safety, Abu Dhabi police.

Hassan's role: Project manager (Traffic Engineering part).

Project Period: From June 2013 to June 2017

GRADUATE STUDENTS' ADVISEES

<u>Completed Graduate Student Advisees (3 PhD and 8 master's students), main supervisor: Dr. Hany Hassan</u>

| | Complete | d Graduate Student | Advisees (Ma | in supervisor: Hany Hassan) |
|-----|--------------------------------|--|-----------------------------|---|
| No. | Student | Degree | Status | Research Topic |
| 1 | Saba Doulabi | Ph.D. in Civil Engineering (Transportation) | Completed Fall 2022 | Toward a Safer Transportation System for Senior Road Users |
| 2 | Taniya Sultana | Ph.D. in Civil Engineering (Transportation) | Completed Fall 2024 | Examining drivers' preferences & challenges towards V2I & V2V warnings, and CAVs platoons |
| 3 | Mohamed Mohamed | Ph.D. in Civil Engineering (Transportation) | Completed Summer 2025 | Optimizing the impacts of truck platooning on highways network considering human-automated interactions in a mixed road environment |
| 4 | Nischal Khadka | Master of Science in Civil Engineering (MSCE) | Completed Fall 2024 | Exploring the Effects of Connected and Autonomous Vehicles on Traffic Safety and Operation at Full-Cloverleaf Interchanges |
| 5 | Anish KC | Master of Science in Civil Engineering (MSCE) | Completed Fall 2024 | Towards Improving Pedestrian Safety on High-Speed Arterials |
| 6 | Bernard Boakye | Master of Science in Civil Engineering (MSCE) | Completed Fall 2023 | Exploring Older Adults' Mobility Challenges and Preferences before and after COVID-19 Pandemic |
| 7 | Hisham Kunnah | Master of Science in Civil Engineering (MSCE) | Completed Spring 2023 | Examining the Impact of Different Street Lighting Schemes on Traffic Safety and Drivers' Behaviors at Unsignalized Intersections |
| 8 | Adilur Rahim | Master of Science in Civil Engineering (MSCE) | Completed Spring 2022 | Examining Optimal Truck Platoon Configurations to Maximize its Operational, Safety and Environmental Performance |
| 9 | Sirisha Gangireddy* | Master of Science in Civil Engineering (MSCE) | Completed Fall 2023 | Integrating the Concept of Complete Streets into Pavement Preservation |
| 10 | Armaghan Monshizadeg an* | Master of Science in Civil Engineering (MSCE) | Completed Fall 2023 | Impacts of Large-Scale Transportation Infrastructure Investments on Communities |

| 11 | Manika Rana Bhat* | Master of Science in Civil Engineering (MSCE) | | Understanding Social Impacts of Major Disruptions from the Perspective of Destination Access |
|----|----------------------|--|--|--|
|----|----------------------|--|--|--|

^{*} Students who were co-advised and received their assistantships from Dr. Rebecca Bian, Louisiana Transportation Research Center (LTRC).

Ongoing Graduate Student Advisees (2 PhD and 1 master's students), Main supervisor Dr. Hany Hassan

| | Ongoing Graduate Student Advisees (Main supervisor: Hany Hassan) | | | | | | | |
|-----------------|--|--|---|---------------------|--|--|--|--|
| No. | Student | Degree | Research Topic | Expected Graduation | | | | |
| 1 | Abduallah Bayomi | Ph.D. in Civil Engineering (Transportation) | Exploring various methods for predicting trip rates for different land uses | Spring 2027 | | | | |
| 2 | Master of Science Mohamed in Civil Alsaleh Engineering (MSCE) | | Analyzing traffic noise generated from various types of rumble strips installed in Louisiana | Summer 2026 | | | | |
| 3 | Alaa Shams | Ph.D. in Civil Engineering (Transportation) | Real-time Identifications of Traffic Safety Hazards at Work Zones using Artificial Intelligence | Fall 2027 | | | | |
| 4 Shrestha in C | | Master of Science in Civil Engineering (MSCE) | Examining Safety of median openings on High-Speed Highways | Fall 2027 | | | | |

Service as Thesis/Dissertation Committee Member

| | Ph.D. Thesis | | | | | | | | |
|-----|------------------------------|--|--------------------|---|------------|--|--|--|--|
| No. | Student | Degree / Status | Main Advisor | Research Topic | University | | | | |
| 1 | Anas Abualia | Ph.D. (Transportation) Ongoing | Louay Mohammad | Develop and Design Durable Open-Graded Friction Course Asphalt Mixtures | LSU | | | | |
| 2 | Md Tanvir Ahmed Sarkar | Ph.D. (Transportation) Ongoing | Mostafa Elseifi | A new generation of multi- functional asphalt emulsion with hydrophobic and luminescent properties | LSU | | | | |
| 3 | Ibrahim Elnaml | Ph.D. (Transportation) Spring 2024 | Louay Mohammad | Assessment of Engineering Performance and Environmental Impacts of High Reclaimed | LSU | | | | |

| | | | | Asphalt Pavement (RAP) Asphalt Mixtures in Flexible Pavements | |
|-----|---|--|--------------------|--|--------------------------|
| | | Ph.D. | | Understanding and Modeling | |
| 4 | Mohammad Shapouri | (Transportation) Fall 2023 | Brian Wolshon | Drivers' En-Route Diversion Behavior During Congestion | LSU |
| 5 | Sailesh Acharya | Ph.D. (Transportation) Summer 2023 | Michelle Mekker | Long-Distance Recreational Travel Behavior and Implications of Autonomous Vehicles | Utah State University |
| 6 | 6 Shaopan Guo Ph.D. (Electrical & Computer Engineering) Spring 2023 | | Xiangyu Meng | Control and Optimization of Multi-Agent Systems with Applications in Connected and Autonomous Electric Vehicles | LSU |
| 7 | Hossam Abohamer | Ph.D. (Transportation) Spring 2022 | Mostafa Elseifi | A New Generation of Open- Graded Friction Course for Enhanced Durability and Functionality | LSU |
| | | | Master's | <u> </u> | |
| No. | Student | Degree / Status | Main Advisor | Research Topic | University |
| 1 | Mohammad Hadizadeh Pirbasti | MSCE Fall 2024 | Mostafa Elseifi | Evaluation of effects of various types of inert and active fillers in asphalt mixtures | LSU |
| 2 | Sudhir Bharati | MSCE Summer 2024 | Louay Mohammad | Assessment of LADOTD's Friction Aggregate Sources through Laboratory and Accelerated Testing | LSU |
| 3 | Md Afifi Rahman Chowdhury | MSCE Ongoing | Mostafa Elseifi | Life-Cycle Assessment of Electric Scooter: A comprehensive Sustainable Analysis of a Shared Micro-Mobility Option and User Survey Insights. | LSU |
| 4 | Mahesh Krishna Reddy | MSCE Summer 2024 | Louay Mohammad | Assessing moisture damage performance of asphalt mixtures utilizing different additives and conditioning techniques | LSU |
| 5 | Shasank Pant | MSCE Spring 2024 | Louay Mohammad | Improving Long-Term Flexible Pavement Performance in Louisiana: Effect of Balanced Asphalt Mixture Design Method and Construction Techniques | LSU |
| 6 | Corey Mayeux | MSCE Fall 2023 | Brian Wolshon | Quantifying the Effects of Covid- 19 on port Congestion | LSU |
| 7 | 7 James MSCE Brian Fall 2023 Wolshon | | | The Effects of Disruption Type, Trip Purpose, Gender, and Age on Driver Diversion Willingness in the United States of America | LSU |
| 8 | Grace Cole | MSCE Spring 2023 | Brian Wolshon | Motivators and Preferences of Route Diversion During Roadway Incidents | LSU |
| 9 | Md Nafis Imtiyaz | MSCE Spring 2022 | Chester Wilmot | Estimating Future Crash Rates on Roads in Louisiana | LSU |

| 10 | Ibrahim Elnaml | M.S. in construction management Spring 2022 | Marwa Hassan | [(HMA(') Mixtures lising ('riimh | | |
|----|--------------------|--|-------------------|--|-----|--|
| 11 | Mishuk Majumder | MSCE Fall 2020 | Chester Wilmot | An Approach to Counting Vehicles from Pre-Recorded Video Using Computer Algorithms | LSU | |

Undergraduate Research Advising (10 undergraduate students)

| No. | Student Name | Semester | University / School |
|-----|-------------------------|-------------|---|
| 1 | Augustus M Mondragon | Spring 2025 | LSU |
| 2 | Jaden J Laudun | Spring 2025 | LSU |
| 3 | Jodie Robinson | Spring 2024 | LSU |
| 4 | Samuel Daigle | Spring 2024 | LSU |
| 5 | Xagen Bicer | Spring 2023 | Kenilworth Science and Technology Charter School |
| 6 | Andy Ou | Summer 2023 | Baton Rouge Magnet High school |
| 7 | Connor Crow | Summer 2022 | LSU |
| 8 | Brennan Smith | Summer 2022 | LSU |
| 9 | Kenneth Odinet, | Summer 2021 | LSU |
| 10 | Josue Angel Palacios | Summer 2021 | LSU |
| 11 | Adam Joseph Dupuy | Spring 2020 | LSU |
| 12 | Caleb Michael Freyder | Spring 2020 | LSU |

Honor Thesis Advising (1 undergraduate student)

| Student | Degree / Status | Main Advisor | Research Topic | University |
|-------------------|---|-----------------|--|------------|
| Nathalie Dante | Undergraduate Honor Thesis (Completed Spring 2022) | Hany Hassan | Influence of CAVs On Driver's Decisions in Various Roadway Scenarios | LSU |

Hany Hassan, Ph.D. 10/19

REFEREED JOURNAL PUBLICATIONS

(* corresponding author, <u>underlined</u>: advised students):

- 1. <u>KC, A., Hassan, H.*, Bayomi, A.,</u> Donaldson, J. (2025). An Empirical Investigation of Pedestrians' Crossing Behaviors and Trust in Human-Driven versus Autonomous Vehicles on High-Speed Arterials: Insights from a Virtual Reality Study, Journal of Transportation Research Part F: Psychology and Behaviour, In press (accepted 7/21/2025).
- 2. **Hassan, H.*,** Mohamed, M., Rahim, A., Melson, C. (2025). Examining Truck Platoon Configurations to Maximize Operational, Safety, and Environmental Performance, ASCE's Journal of Transportation Engineering, Part A: Systems, In Press (Accepted, 4/28/2025).
- 3. <u>Bhat M.</u>, Bian, R.*, Tolford, T., and **Hassan, H.** (2025). Understanding Social Impacts of Major Disruptions from the Perspective of Destination Access, Data Science for Transportation, https://link.springer.com/article/10.1007/s42421-025-00122-8
- 4. <u>Sultana, T.</u> and **Hassan, H.*** (2025). Effects of connected vehicle (CV) technology on improving driver behavior in the presence of connected and automated vehicle (CAV) platoons, Journal of Transportation Research Part F: Psychology and Behaviour, 109, 1419-1436, https://doi.org/10.1016/j.trf.2025.01.046
- 5. <u>Sultana, T.*</u>, **Hassan, H.** and Wolshon B. (2024). Toward the integration of vehicle-to-infrastructure (V2I) communication in transportation system: an investigation of drivers' perceptions and preferences for V2I messages. Journal of Intelligent Transportation Systems, https://doi.org/10.1080/15472450.2024.2416165.
- 6. <u>Boakye, B.</u>, & **Hassan, H.*** (2024). Investigation into the effects of COVID-19 on the Mobility Preferences and Challenges amongst Senior U.S. Citizens: Insights from a Nationwide Survey Study. Transportation Research Record, 1-16, https://doi.org/10.1177/03611981241275565
- 7. <u>Khadka, N.*</u> and **Hassan, H.** (2024). Exploring the effects of Connected and Autonomous Vehicles on traffic safety and operation at full-cloverleaf interchanges. *Journal of Transportation Safety & Security*, 1–29. https://doi.org/10.1080/19439962.2024.2361150
- 8. <u>Mohamed, M.*</u>, **Hassan, H.** (2024). Empirical Analysis of Drivers' Merging and Diverging Responses to Autonomous Truck Platooning on Freeway Weaving Segments, ASCE's Journal of Transportation Engineering, Part A: Systems, 150 (10): 04024065, https://ascelibrary.org/doi/10.1061/JTEPBS.TEENG-8409.
- 9. <u>Sultana, T.* and Hassan, H.</u> (2024). Does Recognizability of Connected and Automated Vehicles (CAVs) Platoons Affect Drivers' Behavior and Safety? Transportation Research Part F: Traffic Psychology and Behaviour, Vol. 103, pp. 368-386, available at https://www.sciencedirect.com/science/article/abs/pii/S1369847824000950
- 10. Mohamed, M.*, **Hassan, H.** (2024). Developing fuel savings performance function considering various truck platooning configurations, SAE International Journal of Fuels and Lubricants, Volume 17, Issue 3, Article ID: 04-17-03-0018, available at https://doi.org/10.4271/04-17-03-0018
- 11. <u>Doulabi, S.*</u>, <u>Abdu Kunnah, H., **Hassan, H.** (2024). Improving Road Safety at Horizontal Curves using V2I Speed Warning Messages, Journal of Safety Research, Volume 88, Pages 68-77, https://doi.org/10.1016/j.jsr.2023.10.009</u>
- 12. <u>Abdu Kunnah, H.*, </u>**Hassan, H.** (2023). An Exploration of the Effects of Various Street Lighting Conditions on Driver Behaviors and Safety at Stop-controlled Intersections: A Driving Simulator Experiment. Journal of Transportation Safety & Security [ISSN: 1943-9962], https://doi.org/10.1080/19439962.2023.2236035
- 13. <u>Doulabi, S.</u>*, **Hassan, H.** (2023). Near-term impact of COVID-19 pandemic on seniors' crash size and severity. Accident Analysis and Prevention, Vol 185, 107037, https://www.sciencedirect.com/science/article/pii/S0001457523000842

- 14. <u>Doulabi, S.</u>*, **Hassan, H.**, Li, B. (2023). Senior Americans' Perceptions, Attitudes, and Safety Concerns toward AVs. Journal of Safety Research., Vol 84, Pages 218-231, https://www.sciencedirect.com/science/article/pii/S002243752200175X?via%3Dihub
- 15. **Hassan, H.*,** Lauzon, M., Ferguson, M., Newbold, B., Vrkljan, B., Razavi, R. (2022). Factors affecting driving cessation of older adults and their satisfaction with mobility options, Transportation Research Record, 1-10, https://doi.org/10.1177/03611981211065739.
- 16. Rahim, A.*, Hassan, H. (2021). A Deep Learning Based Traffic Crash Severity Prediction Framework. Accident Analysis and Prevention, Volume 154, 106090, available at https://www.sciencedirect.com/science/article/pii/S0001457521001214
- 17. <u>Doulabi, S.*</u>, **Hassan, H.**, Ferguson, M., Razavi, S. and Paez, A. (2021). Exploring the determinants of older adults' susceptibility to pedestrians' incidents. Accident Analysis and Prevention, volume 155, 106100, https://www.sciencedirect.com/science/article/pii/S0001457521001317
- 18. **Hassan, H.***, Ferguson, M., Vrkljan, B., Newbold, B., Razavi, R. (2021). Older adults and their willingness to use semi and fully autonomous vehicles: A structural equation analysis. Journal of Transport Geography, 95, 103133, available at https://www.sciencedirect.com/science/article/abs/pii/S0966692321001861
- 19. Paez, A.*, **Hassan, H.,** Ferguson, M. & Razavi, S. (2020). A systematic assessment of the use of opponent variables, data subsetting and hierarchical specification in two-party crash severity analysis. Accident Analysis and Prevention, Volume 144, 105666, https://www.sciencedirect.com/science/article/abs/pii/S0001457520303298
- 20. **Hassan, H.*,** Ferguson, M., Razavi, S. and Vrkljan, B. (2019). Factors that influence Older Canadians' Preferences for using Autonomous Vehicle Technology: A Structural Equation Analysis. Transportation Research Record, Vol. 2673(1), pp. 469–480. https://journals.sagepub.com/doi/full/10.1177/0361198118822281
- 21. **Hassan, H.,** Shawky, M., Kishta, M., Garib, A. & Al-Harthei, H. (2017). Investigation of drivers' behavior towards speeds using crash data and self-reported questionnaire. Accident Analysis and Prevention, 98, pp. 348–358.
- 22. Shaaban, K. & **Hassan**, H. (2017). Underage Driving and Seat Belts Use of High School Teenagers in Qatar. Journal of Transportation Safety and Security, Volume 8, pp. 115-129.
- 23. Shawky, M., **Hassan, H.,** Garib, A. & Al-Harthei, H. (2016). Examining the Factors Affecting the Severity of Run-off-Road Crashes in Abu Dhabi. Canadian Journal of Civil Engineering, 43, pp. 132–138.
- 24. **Hassan, H.** (2016). Investigation of the self-reported aberrant driving behavior of young male Saudi drivers: A survey-based study. Journal of Transportation Safety and Security, VOL. 8, NO. 2, 113–128.
- 25. Sahnoon, I., Sarhan, M., **Hassan, H.,** Garib, A. & Al-Harthei, H. (2016). Impact of Red-Light Enforcement Cameras on Safety Performance at Signalized Intersections in Abu Dhabi. Transportation Research Record, 2584, pp. 16–23.
- 26. **Hassan, H.**, Albusaeedi, N., Garib, A. & Al-Harthei, H. (2015). Exploring the nature and severity of heavy trucks crashes in Abu Dhabi, Transportation Research Record, 2517, pp. 1-9.
- 27. Shaaban, K. & Hassan, H. (2014). Modeling Significant Factors affecting Commuters' Perspectives and Propensity to Use the New Proposed Metro Service in Doha. The Canadian Journal of Civil Engineering, 41, pp. 1054–1064.

- 28. **Hassan, H.** & Al-Faleh, H. (2013). Exploring the risk factors associated with the size and severity of roadway crashes in Riyadh. Journal of Safety Research, 47, pp. 67–74.
- 29. **Hassan, H.** & Abdel-Aty, M. (2013). Predicting Reduced Visibility Related Crashes on Freeways Using Real-Time Traffic Flow Data. Journal of Safety Research, 45, pp. 29-36.
- 30. **Hassan, H.** & Abdel-Aty, M. (2013). Exploring the Safety Implications of Young Drivers' Behavior, Attitudes and Perceptions. Accident Analysis & Prevention, 50, pp. 361-370.
- 31. **Hassan, H.**, Abdel-Aty, M., Choi, K. & AlGadhi, S. (2012). Driver Behavior and Preferences for Changeable Message Signs and Variable Speed Limits in Reduced Visibility Conditions. Journal of Intelligent Transportation Systems, 16(3), pp. 1–15.
- 32. Abdel-Aty, M., **Hassan, H.**, Ahmed, M. & Al-Ghamdi, A.S. (2012). Real-time prediction of visibility related crashes. Transportation Research Part C, 24, pp. 288–298.
- 33. **Hassan, H.** & Abdel-Aty, M. (2011). Analysis of drivers' behavior under reduced visibility conditions using a structural equation modeling approach. Transportation Research Part F, 14(6), pp. 614–625.
- 34. Pande, A., Das, A., Abdel-Aty, M. & **Hassan, H.** (2011). Real-time crash risk estimation: are all Freeways created equal? Transportation Research Record, 2237 (2), pp. 60–66.

REFEREED CONFERENCE PUBLICATIONS

- 1. <u>Gangireddy, S.,</u> R. Bian, T. Tolford, and **H. Hasan**. (2023) Incorporating the Concept of Complete Streets into Pavement Preservation. ASCE Conference Proceedings of the International Conference on Transportation & Development (ICTD) (https://ascelibrary.org/doi/10.1061/9780784484883.020)
- 2. <u>Doulabi, S.</u>, **Hassan, H.**, Li, B. (2022). Exploring Seniors' Perceptions and Attitudes toward Autonomous Vehicles after Experiencing the COVID-19 Pandemic. Accepted for Presentation at Annual meeting of Transportation research board, Washington DC, Jan. 2023.
- 3. Doulabi, S.*, Hassan, H. (2021). Analyzing Older Drivers' Crash Severity in Louisiana. Tran-SET 2021, June 3–4, 2021 | Virtual Conference, © 2021 American Society of Civil Engineers. Available online at https://filestogeaux.lsu.edu/public/download.php?FILE=louaym/94700asBSFK
- **4. Hassan, H.,** Lauzon, M., Ferguson, M., Newbold, B., Vrkljan, B., Razavi, S. (2021). Factors affecting driving cessation of older adults and their satisfaction with mobility options. Annual meeting of Transportation research board.
- 5. **Hassan, H.,** Byrne, K., Ferguson, M., Newbold, B., Vrkljan, B., Razavi, S. (2020). Older Canadians' preferences, challenges, and concern to use current and emerging transportation alternatives. Annual meeting of Transportation research board.
- 6. **Hassan, H.,** Ferguson, M., Vrkljan, B. and Razavi, S. (2019). Factors that influence Older Canadians' Preferences for using Autonomous Vehicle Technology: Annual meeting of Transportation research board.
- 7. Farooqui, N., Ferguson, M. and Razavi, S. (2019). Examining Contributing Factors to Motorcycle Crashes using Matched Case-Control Logistic Regression. Transportation Research Record, Annual meeting of Transportation research board.
- 8. **Hassan, H.,** Sarhan, M., Garib, A., Al Harthei, H. (2017). Drivers' Time Headway Characteristics and Factors Affecting Tailgating Crashes. Transportation Research Board, 96th Annual Meeting Compendium of Papers, TRB 17-03478.

- 9. Sahnoon, I., **Hassan, H.,** Sarhan, M., Garib, A., Al Harthei, H. (2016) Impact of Red-Light Enforcement Cameras on Safety Performance at Signalized Intersections in Abu Dhabi, Annual Meeting of the Transportation Research Board, Washington DC.
- 10. Shaaban, K., **Hassan, H.** (2016). Problems of Underage Driving and Seat Belt Use among High School Teenagers in Qatar. Transportation Research Board, 95th Annual Meeting Compendium of Papers, TRB 16-3613.
- 11. **Hassan, H.**, Shawky, M., Garib, A., Al-Harthei, H. (2015). Examining the differences between contributing factors affecting the severity of Single and Multi-Vehicle Crashes. Transportation Research Board, 94th Annual Meeting Compendium of Papers, TRB 15-3625.
- 12. Shawky, M., **Hassan, H.**, Garib, A., Al-Harthei, H. (2014). Examining Factors Affecting the Severity of Run-off-Road Crashes: Abu Dhabi Case Study. Presented at the 1st IRF Asia Regional Congress in Bali, Indonesia.
- 13. **Hassan, H.** (2014). Examining the factors associated with the involvement of the Saudi' young drivers in at-fault crashes: A Survey-Based Study. Transportation Research Board, 93th Annual Meeting Compendium of Papers, TRB 14-0789.
- 14. Shaaban, K., **Hassan, H.** (2014). Exploring the Factors Affecting Commuters' Perspectives and Tendency to use a Proposed Public Transit Service. Transportation Research Board, 93th Annual Meeting Compendium of Papers, TRB 14-0595.
- 15. **Hassan, H.**, Al-Faleh, H., & Al-Rashidi, A. (2013). Comprehensive Analysis of the Severity and Nature of Traffic Crashes Occurring on Rural Roads in KSA. 17th IRF World Meeting & Exhibition, Riyadh, Nov. 2013.
- 16. **Hassan H.**, Dimitriou, L. (2013). Examining Severe Traffic Crashes in Riyadh using Different Data Mining Techniques. WCTR Rio, Brazil.
- 17. Dimitriou, L., **Hassan H.** (2013). Spatial Prediction of Car Crashes Severity Based on Dynamically Updated MIMO Autoregressive Neural Models. WCTR Rio, Brazil.
- 18. **Hassan H.**, Dimitriou, L., Abdel-Aty M. and Al-Ghamdi, A. (2013). Analysis of Risk Factors Affecting the Size and Severity of Traffic Crashes in Riyadh, Transportation Research Board, 92th Annual Meeting Compendium of Papers, paper no.13-2333
- 19. Dimitriou, L. and **Hassan H.** (2013). Dynamic Autoregressive Neural Networks for Spatially Distributed Time Series Prediction of Car Crashes in Urban Networks, Transportation Research Board, 92th Annual Meeting Compendium of Papers, paper no.13-4272
- 20. Abdel-Aty M. **Hassan H.** and Ahmed M. (2012). Real-time analysis of visibility related crashes: can loop detector and AVI data predict them equally? Transportation Research Board, 91th Annual Meeting Compendium of Papers, paper no.12-0113
- 21. **Hassan H.**, Abdel-Aty M. and Oloufa, A. (2011). The effect of warning messages and variable speeds in different visibility conditions. Transportation Research Board, 90th Annual Meeting Compendium of Papers, paper no. 11-0354
- 22. **Hassan H.** and Abdel-Aty M. (2011). Exploring visibility related crashes on freeways based on real-time traffic flow data. Transportation Research Board, 90th Annual Meeting Compendium of Papers, paper no. 11-0920
- 23. **Hassan H.** and Abdel-Aty M. (2011). How CMS and VSL affect Drivers' Speeds under Low Visibility Conditions? The Australasian College of Road Safety National Conference, Melbourne

- 24. **Hassan H.** and Abdel-Aty M. (2011). Design and Administration of a survey to Investigate Drivers' responses to Reduced Visibility Conditions, 9th International Conference on Transport Survey Methods, Chile
- 25. **Hassan H.**, Abdel-Aty M. and Oloufa, A. (2011). Use and content of CMS and VSL under low visibility conditions, 18th ITS world congress, Orlando, USA
- 26. Abdel-Aty M., Oloufa A., **Hassan H.**, Ahmed M. and Siddiqui M. (2010). Portable Visibility Warning System for the Safety of Highways, 17th ITS world congress, Busan, Korea

PRESENTATIONS

- 1. **Hassan, H.** Examining the impacts of truck platooning on highways network considering human-automated interactions. Annual Meeting of the Transportation Research Board, Jan. 2025. (presenter: Hany Hassan).
- 2. Moahmed, M., and **Hassan**, H. Exploring the Impact of Various Lateral Movement Strategies of Autonomous Truck Platooning on Traffic Safety and Efficiency. Annual Meeting of the Transportation Research Board, Jan. 2025. (presenter: Hany Hassan).
- 3. Sultana, T., and **Hassan, H**. Exploring the Effectiveness of Connected Vehicle Technology in Enhancing Driver Behavior and Safety during Hurricane Evacuation. Annual Meeting of the Transportation Research Board, Jan. 2025. (presenter: Hany Hassan).
- 4. KC, A., Bayomi, A., **Hassan, H.** and Dondalson, J. Investigating Pedestrians' Crossing Behavior and Trust towards Human-Driven and Autonomous Vehicles on High-Speed Arterials: Insights from a Virtual Reality Study. Annual Meeting of the Transportation Research Board, Jan. 2025. (presenter: Hany Hassan).
- 5. Boakye, B., Tellier, M., and **Hassan, H.** Did COVID-19 Change Senior Americans' Willingness to Use Autonomous Vehicles?: Insights from a Nationwide Survey in the United States. Annual Meeting of the Transportation Research Board, Jan. 2025. (presenter: Hany Hassan).
- 6. Sultana, T., **Hassan, H**., and Wolshon, B. Examining Drivers' Perceptions and Preferences Regarding Vehicle to Infrastructure Interactions within Connected Vehicle Technology. Annual Meeting of the Transportation Research Board, Jan. 2024. (presenter: Hany Hassan).
- 7. **Hassan, H.**, Rahim, A., Mohamed, M. and Melson, C. Analyzing the Optimal Truck Platooning Configuration on Highways for Economic and Environmental Sustainability. Annual Meeting of the Transportation Research Board, Jan. 2024. (presenter: Hany Hassan).
- 8. Monshizadegan, A., Bian, R., Stopher, P., **Hassan, H.** The Impact of Large-Scale Transportation Infrastructure Investments on Communities. Annual Meeting of the Transportation Research Board, Jan. 2024. (presenter: Armaghan Monshizadegan).
- 9. Bhat, M., Bian, R., Tolford, T., and **Hassan, H.** Understanding the Social Impact of Major Disruptions from the Perspective of Destination Access. Annual Meeting of the Transportation Research Board, Jan. 2024. (presenter: Manika Rana Bhat).
- 10. Khadka, N., and **Hassan, H.** Analyzing the Impact of Connected and Autonomous Vehicles on Traffic Operation and Safety at Cloverleaf Interchanges. Annual Meeting of the Transportation Research Board, Jan. 2024. (Presenter: Nischal Khadka
- 11. **Hassan, H.** How to implement connected and automated logistic solutions into the overall

- traffic management, 4th International Symposium on Freeway and Tollway Operations, 26-30 June 2023, Vienna/Austria (presenter: Hany Hassan).
- 12. Mohamed, M. **Hassan, H.** Smart Mobility and Autonomous Truck Platooning, the 2023 Spring Gulf Region Intelligent Transportation Systems (GRITS) Workshop, New Orleans, April 4, 2023 (presenter: Hany Hassan).
- 13. Mohamed, M, "Understanding the Impacts of Truck Platooning: From Simulation to Real-World Scenarios" presented in a poster format at the 2023 Graduate Research Conference (GRC), LSU, April 2023, (presenter: PhD student: Mohamed Mohamed)
- 14. Mohamed, M and **Hassan, H.**, "Impacts of Truck Platooning on US Highways: Preliminary Findings from a Driving Simulator Study" presented at the 2023 Louisiana Transportation Conference, Baton Rouge, March 2023 (presenter: Hany Hassan / PhD student: Mohamed Mohamed).
- 15. **Hassan, H.** Truck Platooning Operations and Benefits, 102nd Annual Meeting of the Transportation Research Board, Intelligent Transportation Systems (ACP15) Committee Evening Session, Washington DC, 10 January 2023 (presenter: Hany Hassan).
- 16. Sultana, T. and **Hassan, H.** Investigating how drivers behave differently while dealing with connected and automated vehicle (CAV) platoons and ordinary cars: A driving simulation study, 102nd Annual Meeting of the Transportation Research Board, Washington DC, January 2023 (presenter: Taniya Sultana).
- 17. Doulabi, S. and **Hassan, H.** Exploring Seniors' Perceptions and Attitudes toward Autonomous Vehicles after Experiencing the COVID-19 Pandemic, 102nd Annual Meeting of the Transportation Research Board, Washington DC, January 2023 (presenter: Hany Hassan).
- 18. **Hassan, H.**, Minimum Intersection Illumination, Recent and Ongoing Projects at Louisiana Transportation Research Center, Louisiana APA 2022 State Conference: Planning and Public Health, November 9 11 | Gallier Hall, 545 St Charles Ave, New Orleans (presenter: Hany Hassan).
- 19. Sultana, T. and **Hassan, H.** Examine driver's behaviors to V2V and V2I warning massages, 4th International Road Federation Asia-Pacific Regional Congress, Kuala Lumpur, Malaysia, October 2022 (presenter: Hany Hassan).
- 20. Mohamed, M. and **Hassan, H.** Smart Mobility and Autonomous Truck Platooning, 4th International Road Federation Asia-Pacific Regional Congress, Kuala Lumpur, Malaysia, October 2022 (presenter: Hany Hassan).
- 21. **Hassan, H.,** Lauzon, M., Ferguson, M., Newbold, B., Vrkljan, B., Razavi, S. Factors affecting driving cessation of older adults and their satisfaction with mobility options. 101st Annual meeting of Transportation research board, Washington DC, January 2022 (presenter: Hany Hassan).
- 22. **Hassan, H.,** Byrne, K., Ferguson, M., Newbold, B., Vrkljan, B., Razavi, S. Older Canadians' preferences, challenges, and concern to use current and emerging transportation alternatives. 100th Annual meeting of Transportation research board, Washington DC, January 2021 (presenter: Hany Hassan).
- 23. **Hassan**, H., Ferguson, M., Vrkljan, B. and Razavi, S. Factors that influence Older Canadians' Preferences for using Autonomous Vehicle Technology, 99th Annual meeting of Transportation research board, Washington DC, January 2020 (presenter: Hany Hassan).

- 24. **Hassan, H.,** Farooqui, N., Ferguson, M. and Razavi, S. Examining Contributing Factors to Motorcycle Crashes using Matched Case-Control Logistic Regression. 99th Annual meeting of Transportation research board, Washington DC, January 2020 (presenter: Hany Hassan).
- 25. **Hassan, H.,** Sarhan, M., Garib, A., Al Harthei, H. Drivers' Time Headway Characteristics and Factors Affecting Tailgating Crashes. 97th Annual meeting of Transportation research board, Washington DC, January 2018 (presenter: Hany Hassan).
- 26. Sahnoon, I., Sarhan, M., **Hassan, H.,** Garib, A. & Al-Harthei, H. Impact of Red-Light Enforcement Cameras on Safety Performance at Signalized Intersections in Abu Dhabi, 96th Annual meeting of Transportation research board, Washington DC, January 2017 (presenter: Hany Hassan).
- 27. Shaaban, K. and **Hassan, H.** Problems of Underage Driving and Seat Belt Use among High School Teenagers in Qatar, 95th Annual Meeting of the Transportation Research Board, Washington DC, January 2016 (presenter: Hany Hassan).
- 28. **Hassan, H.**, Shawky, M., Garib, A., Al-Harthei, H. Exploring the nature and severity of heavy trucks crashes in Abu Dhabi, 94th Annual Meeting of the Transportation Research Board, Washington DC, January 2015 (presenter: Hany Hassan).
- 29. Shaaban, K. and **Hassan, H.** Exploring the Factors Affecting Commuters' Perspectives and Tendency to Use a Proposed Public Transit Service, 94th Annual Meeting of the Transportation Research Board, Washington DC, January 2015 (presenter: Hany Hassan).
- 30. **Hassan, H.** Examining the factors associated with the involvement of the Saudi' young drivers in at-fault crashes, 93th Annual Meeting of the Transportation Research Board, Washington DC, January 2014 (presenter: Hany Hassan).
- 31. **Hassan, H.** & Al-Faleh, H. Analysis of Risk Factors Affecting the Size and Severity of Traffic Crashes in Riyadh, 92th Annual Meeting of the Transportation Research Board, Washington DC, January 2013 (presenter: Hany Hassan).
- 32. **Hassan H**. and Dimitriou, L. Examining Severe traffic crashes in Riyadh using different data mining techniques, World Conference on Transport Research (WCTR), Rio de Janeiro, Brazil, July 2013 (presenter: Hany Hassan)
- 33. **Hassan, H.** and Abdel-Aty, M. Real-time analysis of visibility related crashes: can loop detector and AVI data predict them equally? 91th Annual Meeting of the Transportation Research Board, Washington DC, January 2012 (presenter: Hany Hassan)
- 34. **Hassan, H.** and Al-rashidi, Al. Improving traffic safety system of school transportation of Saudi Arabia, 1st international conference of school transportation, Riyadh, October 2012 (presenter: Hany Hassan).
- 35. **Hassan, H.** and Abdel-Aty, M. Developing Saudi Highway safety manual, traffic safety workshop, King Saud University, Saudi Arabia, May 2012 (presenter: Hany Hassan).
- 36. **Hassan, H.** and Abdel-Aty, M. The Effect of Warning Messages and Variable Speeds in Different Visibility Conditions, 90th Annual Meeting of the Transportation Research Board, Washington DC, January 2011 (presenter: Hany Hassan).
- 37. **Hassan, H.** and Abdel-Aty, M. Exploring Visibility Related Crashes on Freeways based On Real-time Traffic Flow Data, 90th Annual Meeting of the Transportation Research Board, Washington DC, January 2011 (presenter: Hany Hassan).
- 38. **Hassan, H.** and Abdel-Aty, M. Design and Administration of a survey to Investigate Drivers' responses to Reduced Visibility Conditions, 9th International Conference on Transport Survey Methods, November 2011 (presenter: Hany Hassan).

- 39. **Hassan, H.** and Abdel-Aty, M. Portable Visibility Warning System for the Safety of Highways, 17th ITS world congress, Busan, Korea, October, 2010 (presenter: Abdel-Aty, M.).
- 40. **Hassan**, **H.** and Abdel-Aty, M. Portable Visibility Warning System for the Safety and Efficiency of Highways, 18th International Conference on Management of Technology, Orlando, April 2009 (presenter: Hany Hassan).

CONFERENCE SESSION CHAIR

- 1. Lectern session Chair. Human Factors of Infrastructure Design and Operations (session: 4051), Annual meeting of transportation research board, Washington D.C., January 2025.
- 2. Poster session Chair. Intelligent Transportation Systems in the Era of Connected Vehicles and Vehicle to Everything Communication (session: 3211), Annual meeting of transportation research board, Washington D.C., January 2025.
- 3. Lectern session Chair. Lane Change Interactions (session: 2001), Annual meeting of transportation research board, Washington D.C., January 2024.
- 4. Lectern session Chair. Research on Smart Mobility and the Future of Intelligent Transportation Systems (session: 3227), Annual meeting of transportation research board, Washington D.C., January 2024.
- 5. Lectern session Chair. Human Factors of Infrastructure Design and Operations, 102nd Annual meeting of transportation research board, Washington D.C., January 2023.
- 6. Lectern session Chair. Environmental and Sustainability in bridge and roadworks. 4th International Road Federation Asia-Pacific Regional Congress, Kuala Lumpur, Malaysia, October 2022.
- 7. Poster session chair. Infrastructure Design and Operations: Current Human Factors Perspectives, 100th Annual meeting of Transportation research board, Washington D.C., January 2021.
- 8. Lectern session Chair. Connected vehicles applications for development, 99th Annual meeting of Transportation research board, Washington D.C., January 2020.

TEACHING EXPERIENCE at LSU

Teaching evaluations in chronological order (rankings on 5.0 scale).

| | | Ennellmant | | Student Evaluation (5.0 scale, with 5.0 = highest) | | | | | | |
|--------------|--|------------|------|--|---------------------|------|---------|-----------------|------|---------|
| Term | Course Name | Enrollment | | | Instructor Feedback | | | Course Feedback | | |
| | | UG | Grad | Total | Instructor | Dep. | College | Instructor | Dep. | College |
| Fall 2019 | CE 7645 Transportation Systems Analysis | | 5 | 5 | 4.56 | 4.34 | 4.13 | 4.33 | 4.20 | 3.96 |
| Spring 2020 | CE 3600 Principles of Highways and traffic Engineering | 55 | | 55 | 4.46 | 4.30 | 4.19 | 4.33 | 4.16 | 4.02 |
| Fall 2020 | CE 7610 Traffic Engineering Operations and Control | - | 3 | 3 | 4.30 | 4.34 | 4.14 | 4.06 | 4.20 | 4.00 |
| Spring | CE 3600 Principles of Highways and traffic Engineering | 71 | | 71 | 4.26 | 4.20 | 4.12 | 4.18 | 4.09 | 3.99 |
| 2021 | CE 7700 Intelligent Transportation Systems | | 5 | 5 | 4.55 | 4.20 | 4.12 | 4.06 | 4.09 | 3.99 |

| Term | Course Name | Enrollment | | | Student Evaluation (5.0 scale, with 5.0 = highest) | | | | | |
|----------------|---|------------|------|-------|--|------|---------|-----------------|------|---------|
| | | | | | Instructor Feedback | | | Course Feedback | | |
| | | UG | Grad | Total | Instructor | Dep. | College | Instructor | Dep. | College |
| Fall 2021 | CE 7645 Transportation Systems Analysis | | 11 | 11 | 4.53 | 4.24 | 4.12 | 4.20 | 4.13 | 3.96 |
| Spring 2022 | CE 3600 Principles of Highways and traffic Engineering | 48 | | 48 | 4.02 | 4.28 | 4.13 | 3.96 | 4.13 | 3.98 |
| | CE 7600 Transportation Engineering Data Collection Methods | | 9 | 9 | 4.73 | 4.28 | 4.13 | 4.38 | 4.13 | 3.96 |
| | HNRS 4000 Honor Thesis | 1 | | 1 | 5.0 | 4.7 | 4.7 | 5.0 | 4.4 | 4.4 |
| Fall 2022 | CE 3600 Principles of Highways and traffic Engineering | 35 | | 35 | 4.62 | 4.28 | 4.16 | 4.38 | 4.17 | 4.01 |
| | CE 7700 Intelligent Transportation Systems | | 14 | 14 | 4.39 | 4.28 | 4.16 | 4.13 | 4.17 | 4.01 |
| Spring 2023 | CE 7610 Traffic Engineering Operations and Control | | 12 | 12 | 5.0 | 4.16 | 4.15 | 4.78 | 4.01 | 3.97 |
| Fall 2023 | CE 7645 Transportation Systems Analysis | | 9 | 9 | 4.63 | 4.22 | 4.17 | 4.29 | 4.04 | 3.99 |
| Spring 2024 | CE 3600 Principles of Highways and traffic Engineering | 50 | | 50 | 4.49 | 4.31 | 4.21 | 4.40 | - | - |
| | CE 7600 Transportation Engineering Data Collection Methods | | 6 | 6 | 4.63 | 4.31 | 4.21 | 4.5 | - | - |
| Fall 2024 | CE 7610 Traffic Engineering Operations and Control | | 7 | 7 | 4.75 | 4.19 | 4.20 | 4.92 | 4.48 | 4.17 |

New Courses Developed

Designed and developed the teaching materials of an online course titled CE 4600: Geometric Design of Highway and Airport for the online master's degree in transportation engineering at LSU. So far, I have taught the course twice (in summer 2020 "enrollment=2" and summer 2021 "enrollment=1".