



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

CURRENT POSITION

Assistant Professor in Transportation Engineering (Aug. 2019-Present)

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Department of Civil and Environmental Engineering
Louisiana State University, Baton Rouge, LA 70803
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<https://www.lsu.edu/eng/cee/people/hanyhassan.php>
<http://scholar.google.ae/citations?user=NTpYt3oAAAJ&hl=en>

PROFESSIONAL PROFILE

- A registered professional engineer in the state of Louisiana (PE.00447750).
- Self-motivated and highly skilled professional in Transportation Engineering
- Over 14 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) September 2005
Dissertation: *Environmentally Oriented Road Design*

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 1200 times to date by other researchers (my h-index is 18 and my i10-index is 19). More details can be found at my google scholar profile, which is located at:

[<http://scholar.google.ac/citations?user=NTpYt3oAAAAJ&hl=en>].



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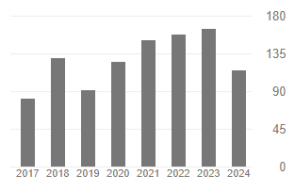
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TITLE	CITED BY	YEAR
Real-time prediction of visibility related crashes MA Abdel-Aty, HM Hassan, M Ahmed, AS Al-Ghamdi Transportation research part C: emerging technologies 24, 288-298	163	2012
Analysis of drivers' behavior under reduced visibility conditions using a Structural Equation Modeling approach HM Hassan, MA Abdel-Aty Transportation research part F: traffic psychology and behaviour 14 (6), 614-625	125	2011
Exploring the safety implications of young drivers' behavior, attitudes and perceptions HM Hassan, MA Abdel-Aty Accident Analysis & Prevention 50, 361-370	116	2013
A deep learning based traffic crash severity prediction framework MA Rahim, HM Hassan	109	2021

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 – Present**
- (4) Member & papers review coordinator, TRB Standing committee on Human Factors of Infrastructure Design and Operation, ACH40 **Aug. 2020 – Present**
- (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. 2019 – Present	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 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).

PI: 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).

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

Project Period: 01/2024 – 12/2025

3. 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

4. Safety and Traffic Operations at Cloverleaf Interchanges

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

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

Project Period: 08/2022 – 07/2024

Completed funded projects*(LSU Project Credit = LSU PC)***1. Development of Statewide Design Guidelines for Improving Pedestrian Safety on High-Speed Arterials in Louisiana**

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

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

Project Period: 10/2022 – 03/2024

2. Examining drivers' behaviors to connected and automated vehicles

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

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

Project Period: 08/2021 – 02/2023

3. 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.

PI: Brian Wolshon, Co-PI: Hany Hassan (LSU PC = 50% credit)

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

4. Minimum Intersection Illumination

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

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

Project Period: 05/2020 – 10/2022

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

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

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

Project Period: 06/2021 – 06/2022

6. 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

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

Project Period: 04/2022 – 10/2023

7. 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

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

Project Period: 08/2020 – 02/2022

8. 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

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

Project Period: 08/2020 – 02/2022

9. 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

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

Project Period: 08/2019 – 02/2021

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

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

PI: Charles Malveaux, Marcio de Queiroz (Co-PI), Xin Li (Co-PI), Hany Hassan (Co-PI, 20% credit), ZeWei He (Co-PI)

Project Period: 08/2019 – 02/2021

11. 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

12. 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

13. 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.

14. 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.

15. 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.

16. 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.

17. 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.

18. 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

Major Advisor (1 PhD complete, 5 masters' complete, 3 PhDs in progress, 3 Masters in progress,)

Completed Graduate Student Advisees (Main 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	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
3	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
4	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
5	Sirisha Gangireddy	Master of Science in Civil Engineering (MSCE)	Completed Fall 2023	Integrating the Concept of Complete Streets into Pavement Preservation
6	Armaghan Monshizadegan	Master of Science in Civil Engineering (MSCE)	Completed Fall 2023	Impacts of Large-Scale Transportation Infrastructure Investments on Communities

Ongoing Graduate Student Advisees (Main supervisor: Hany Hassan)				
No.	Student	Degree	Research Topic	Expected Graduation
1	Taniya Sultana	Ph.D. in Civil Engineering (Transportation)	Examining drivers' preferences & challenges towards V2I & V2V warnings, and CAVs platoons	Fall 2024
2	Mohamed Mohamed	Ph.D. in Civil Engineering (Transportation)	Optimizing the impacts of truck platooning on highways network considering human-automated interactions in a mixed road environment	Spring 2025
3	Abduallah Bayomi	Ph.D. in Civil Engineering (Transportation)	Exploring various methods for predicting trip rates for different land uses	Spring 2027
4	Nischal Khadka	Master of Science in Civil Engineering (MSCE)	Exploring the Effects of Connected and Autonomous Vehicles on Traffic Safety and Operation at Full-Cloverleaf Interchanges	Fall 2024
5	Anish KC	Master of Science in Civil Engineering (MSCE)	Towards Improving Pedestrian Safety on High-Speed Arterials	Fall 2024
6	Manika Rana Bhat	Master of Science in Civil Engineering (MSCE)	Understanding Social Impacts of Major Disruptions from the Perspective of Destination Access	Summer 2024

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 Asphalt Pavement (RAP) Asphalt Mixtures in Flexible Pavements	LSU
4	Mohammad Shapouri	Ph.D. (Transportation) Fall 2023	Brian Wolshon	Understanding and Modeling 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	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
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Master's Thesis					
No.	Student	Degree / Status	Main Advisor	Research Topic	University
1	Mohammad Hadizadeh Pirbasti	MSCE Ongoing	Mostafa Elseifi	Evaluation of effects of various types of inert and active fillers in asphalt mixtures	LSU
2	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	Sudhir Bharati	MSCE Summer 2024	Louay Mohammad	Assessment of LADOTD's Friction Aggregate Sources through Laboratory and Accelerated Testing	LSU
3	Mahesh Krishna Reddy	MSCE Spring 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	James Fuller	MSCE Fall 2023	Brian 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 Intiyaz	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	Development of Cost-Effective High-Modulus Asphalt Concrete (HMAC) Mixtures using Crumb Rubber and Local Construction Materials in Louisiana	LSU
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	Jodie Robinson	Spring 2024	LSU
2	Samuel Daigle	Spring 2024	LSU
3	Xagen Bicer	Spring 2023	Kenilworth Science and Technology Charter School

4	Andy Ou	Summer 2023	Baton Rouge Magnet High school
5	Connor Crow	Summer 2022	LSU
6	Brennan Smith	Summer 2022	LSU
7	Kenneth Odinet,	Summer 2021	LSU
8	Josue Angel Palacios	Summer 2021	LSU
9	Adam Joseph Dupuy	Spring 2020	LSU
10	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

REFEREED JOURNAL PUBLICATIONS

(* corresponding author, underlined: advised students):

1. Boakye, B. and **Hassan, H***. (2024). An investigation of the effects of COVID-19 on the mobility preferences and challenges amongst senior Americans: Insights from a Nationwide Survey Study, Transportation Research Record, In press (accepted June 2024).
2. Khadka, N.* 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 and Security, In press (accepted June 2024).
3. Mohamed, M.*, **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, In press (accepted 4-10-2024).
4. Sultana, T.* and **Hassan, H.** (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>
5. 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>
6. Doulabi, S.*, 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>
7. Abdu Kunnah, H.*, **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>
8. Doulabi, S.*, **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>
9. Doulabi, S.*, **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>
10. **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>.
11. **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>
 12. **Doulabi, S.***, **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>
 13. **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>
 14. 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>
 15. **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>
 16. **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.
 17. 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.
 18. 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.
 19. **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.
 20. Sahnoun, 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.
 21. **Hassan, H.**, Albusaedi, 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.
 22. 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.
 23. **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.
 24. **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.
 25. **Hassan, H.** & Abdel-Aty, M. (2013). Exploring the Safety Implications of Young Drivers' Behavior, Attitudes and Perceptions. *Accident Analysis & Prevention*, 50, pp. 361-370.
 26. **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.

27. 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.
28. **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.
29. 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. Gangireddy, S., 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. Doulabi, S., **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. Sahnoun, 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. 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).
2. **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).
 3. 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).
 4. 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).
 5. 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)
 6. **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).
 7. 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).
 8. 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)
 9. 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).
 10. **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).
 11. 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).
 12. 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).
 13. **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).
 14. Sultana, T. and **Hassan, H.** Examine driver's behaviors to V2V and V2I warning messages, 4th International Road Federation Asia-Pacific Regional Congress, Kuala Lumpur, Malaysia, October 2022 (presenter: Hany Hassan).
 15. 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).

16. **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).
17. **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).
18. **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).
19. **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).
20. **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).
21. Sahnoun, 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).
22. 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).
23. **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).
24. 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).
25. **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).
26. **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).
27. **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)
28. **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)
29. **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).
30. **Hassan, H.** and Abdel-Aty, M. Developing Saudi Highway safety manual, traffic safety workshop, King Saud University, Saudi Arabia, May 2012 (presenter: Hany Hassan).

31. **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).
32. **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).
33. **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).
34. **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.).
35. **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. Lane Change Interactions (session: 2001), Annual meeting of transportation research board, Washington D.C., January 2024.
2. 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.
3. Lectern session Chair. Human Factors of Infrastructure Design and Operations, 102nd Annual meeting of transportation research board, Washington D.C., January 2023.
4. Lectern session Chair. Environmental and Sustainability in bridge and roadworks. 4th International Road Federation Asia-Pacific Regional Congress, Kuala Lumpur, Malaysia, October 2022.
5. Poster session chair. Infrastructure Design and Operations: Current Human Factors Perspectives, 100th Annual meeting of Transportation research board, Washington D.C., January 2021.
6. 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).**

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 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 2021	CE 3600 Principles of Highways and traffic Engineering	71	--	71	4.26	4.20	4.12	4.18	4.09	3.99
	CE 7700 Intelligent Transportation Systems	--	5	5	4.55	4.20	4.12	4.06	4.09	3.99
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	-	-

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").