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

CURRENT POSITION

Assistant Professor in Transportation Engineering

(Aug. 2019-Present)

3255 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

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 1 256.37 669.1 (1)] TJETQq0.000008871 0 5950f 842.04 reW* nBT/ 429CID

RESEARCH INTERESS0008871 0 595.32 842.04 reW* nBT/F1 6 Tf1 0 0 1 523.684 776.88 Tm0 g207.6

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. Bt nt, the Intelligent Transporta

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.

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.

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

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.

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 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				

	Ongoing Graduate Student Advisees (Main supervisor: Hany Hassan)						
No.	Student	Degree	Research Topic	Expected Graduation			
1	Taniya Sultana	Ph.D. in Civil Engineering (Transportation)					

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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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		

options, Transportation Research Record, 1-10, https://doi.org/10.1177/03611981211065739.

- 11. <u>Rahim, A.</u>*, **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. <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
- 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.,

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. <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.

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

Curriculum Vita