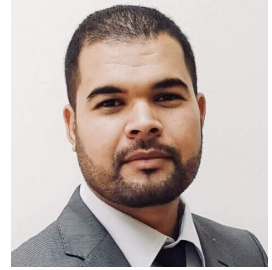


# Curriculum Vitae

## **MUAMER ABUZWIDAH, Ph.D., MSEM**

Assistant Professor in Transportation / Traffic Safety  
Department of Civil and Environmental Engineering  
College of Engineering  
University of Sharjah  
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Sharjah, UAE  
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Email: [mabuzwidah@sharjah.ac.ae](mailto:mabuzwidah@sharjah.ac.ae)



[http://www.sharjah.ac.ae/en/academics/Colleges/eng/dept/ced/Pages/ppl\\_detail.aspx?mcid=36](http://www.sharjah.ac.ae/en/academics/Colleges/eng/dept/ced/Pages/ppl_detail.aspx?mcid=36)

### **Research Interests:**

Traffic Safety, Connected Vehicle, Intelligent Transportation Systems, Driving Simulations, Human Factors, Highway Geometric Design and Traffic Engineering, Optimization-Simulation Applications in Transportation, Advanced Traveler Information Systems, Statistical and Data Mining Applications in Transportation Engineering, Traffic Management System.

### **Education**

#### **Degrees Programs**

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|---|--------|---------------------------|----------------|
| ★ Ph.D. in Civil Engineering            | (2014) | Univ. of Central Florida, | FL / USA       |
| ★ Master of Science in Civil Eng.       | (2011) | Univ. of Central Florida, | FL / USA       |
| ★ Master of Science in Eng. Management. | (2015) | Univ. of Central Florida, | FL / USA       |
| ★ Bachelor of Science in Civil Eng.     | (2005) | Univ. of Tripoli.         | Tripoli/ Libya |

#### **Certificates Programs**

- |  |        |                                |               |
|--|--------|--------------------------------|---------------|
| ★ Innovation Management Certificate.       | (2017) | University of Sharjah          | Sharjah/ UAE  |
| ★ Leadership in Higher Education           | (2015) | University of Sharjah          | Sharjah/ UAE  |
| ★ SAS Data Mining Certificate              | (2012) | Univ. of Central Florida,      | Florida / USA |
| ★ Transportation Engineering Certificate   | (2012) | Univ. of Central Florida,      | Florida / USA |
| ★ Preparing tomorrow's Faculty Certificate | (2011) | Univ. of Central Florida,      | Florida / USA |
| ★ Graduate Teaching Assistant Certificate  | (2011) | Univ. of Central Florida,      | Florida / USA |
| ★ Safer Roads by Design Workshop           | (2012) | International Road Federation, | Florida / USA |

### **Professional Profile**

- Eleven years of statistics related experience in research and applications.
- Have a solid understanding of data mining and statistics modeling.
- Advanced skills in statistics Software,
- Knowledgeable in transportation engineering, traffic safety, highway geometric design.
- Confident in learning and applying new knowledge, following the new development of technologies.
- Work efficiently in a team or independently.
- President of American Society of Highway Engineers (ASHE) – UCF Chapter, 2014- 2015.

- Worked on multiple research projects that addressed Intelligent Transportation Systems, Calibrating the Highway Safety Manual, and traffic safety issues.
- Experienced in teaching Transportation Safety course; as well as transportation related courses.
- Accomplished extensive industry experience regarding the geometric design and the structural designs of Highway elements.
- Worked as a consulting in Highway Maintenance.
- Worked as a project engineer in Highway Maintenance.
- Attended and presented research papers at several conferences that related to the transportation engineering.
- Results-oriented, with strong trouble-shooting skills to meet deadlines

## Work Experience

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- **Assistant Professor (Civil & Enviro. Eng. Dep.) (Sep 2015- present) *University of Sharjah / UAE***
- Post-Doctoral Associate (Civil Eng. Dep.) (Jan 2015-Aug 2015) *Univ. of Central Florida, FL / USA*  
Teaching, supervising graduate students, working on research projects, writing research papers, technical reports and research proposals, also reviewing research papers for different journals.
- Simulation Laboratory Director (Aug 2014- June 2015) *Univ. of Central Florida, Florida / USA*
- President of American Society of Highway Engineers at UCF (2014- May 2015) Florida / USA
- Graduate Teaching Assistant (Civil Eng. Dep.) (2012-2014) *Univ. of Central Florida, Florida / USA*
- Graduate Research Assistant, (Civil Eng. Dep.) (2010-2014) *Univ. of Central Florida, Florida / USA*
  - Work on multiple research projects that addressed traffic safety analysis.
  - Calibrate the Highway Safety Manual (HSM, 2010) using Florida Data.
  - Work on traffic safety assessment of different toll collection systems on expressways using multiple analytical techniques.
  - Evaluate multiple transportation treatments and suggested solutions for the traffic safety problems.
  - Collect data using different sourcing and techniques to come up with the most accurate and complete data for the analysis.
  - Study multiple analysis techniques by enrolling in most statistics courses.
  - Department along with all transportation courses that offered by the Civil Eng. Dep.
  - Study engineering management techniques by enrolling in the M.S. Degree in Engineering Management, and applying that in the research projects.
- Transportation Laboratory Manager, (May 2012-Aug 2014) *Univ. of Central Florida, Florida / USA*
- Transportation Laboratory Supervisor, (May 2010-April 2014) *Univ. of Central Florida, Florida / USA*
- Project Engineer (Jun 2006-Aug 2008) *Libyan Malaysian Comp. for Roads & Const. Tripoli/ Libya*
- Chief Executive Officer (CEO) (2006-2009) *Alburj Aljadid Company Tripoli/ Libya*
- Consulting Engineer (2005-2006) *Al-Inma Comp. and the Bonyan Consulting Eng. Tripoli/ Libya*

## Academic Honors and Awards

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- ★ Leadership in Higher Education Certificate, University of Sharjah, Sharjah- UAE, 2015.
- ★ Award of Excellence in Teaching Assistant, College of Engineering and Computer Science, University of Central Florida, 2015
- ★ The Civil Department Award for Outstanding Graduate Teaching Assistant, Faculty of Engineering, University of Central Florida, USA, 2014.
- ★ The Civil Department Award for completing the B.Sc. Civil Engineering degree with honors (Faculty of Engineering, University of Tripoli, Libya /2005).
- ★ International Road Federation (IRF) Award (Dec, 2012 Orlando, Florida)
  - The University of Central Florida, Grad Presentation Fellowship Award (September **2014**).
  - The University of Central Florida, Grad Presentation Fellowship Award (January **2014**).
  - The University of Central Florida, Grad Presentation Fellowship Award (January **2013**).
  - The UCF Student Government Association Grad Presentation Travel Award (**2013**).
  - The UCF Student Government Association Grad Presentation Travel Award (**2012**).

## Teaching Experience

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★ **University of Sharjah** (Sep 2015 – present) **Sharjah/ UAE**

CEE 526: Highway Safety Analysis. **Graduate Course.**

CEE 529: Advanced Topics in Transportation Engineering. **Graduate Course.**

CEE 524: Intelligent Transportation System. **Graduate Course.**

CEE 495: Professional Practice in Civil and Environmental Eng. **Senior Undergraduate Course.**

CEE 462: Special Topics in Transportation Engineering. **Senior Undergraduate Course.**

CEE 460: Special Topics in Civil Engineering. **Senior Undergraduate Course.**

CEE 426: Highway Design. **Senior Undergraduate Course.**

CEE 301: Engineering Economics. **College level Undergraduate Course.**

CEE 491: Senior Design Project I. **Senior Undergraduate Course.**

CEE 499: Senior Design Project II. **Senior Undergraduate Course.**

★ **University of Central Florida** **Florida/ USA**

TTE 6315 Transportation Safety Analysis. (Teaching when instructor on travel). Spring 2015

CGN3700C - Civil Engineering Measurements and Surveying. (2012 – 2014). Teaching regular class

lecture when instructor on travel. Also fully responsible on the lab section in this class such as teaching the lab lectures indoor and supervising the outdoor training sessions as follows:

- Fall 2012 - (91 Students) - Five lab sessions per week
- Spring 2013 - (79 Students) - Five lab sessions per week
- Fall 2013 - (59 Students) - Four lab sessions per week
- Spring 2014 - (52 students) - Four lab sessions per week

## Committees and Professional Memberships

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Activity	Role	Date
➤ Transportation Sustainability Circle in the Sustainability office	Co-Leader	2019- present
➤ Road Safety Committee	Member	2017- present
➤ American Scarcity of Civil Engineers Club – ASCE – UoS Chapter	Advisor	2020 -2022
➤ Student Affairs Committee	Co-chair	2022-2023
➤ Senior Design Projects Committee	Member	2020-2023
➤ Outreach Committee	Member	2018-2023
➤ UAE level: Scientific Review Committee of the “Think Science”	Judge	2016-present
➤ Student Activities	Co-Coordinator	2016-2023
➤ ASCMCES-17 – Organizing Committee	Member	Spring 2017
➤ Community Service & Outreach Committee	Member	2016- 2017
➤ Students on Probation or at Risk	Member	2016- present
➤ UAE level: Scientific Review Committee of the “Think Science” competition.	Judge	April 2016
➤ A radio talk about pedestrian safety	Gust	017-present
➤ A radio talk about Traffic Safety Education	Gust	017-present
➤ Gulf Traffic Week Events	Supervisor	2016/2017
➤ Department Undergraduate Program Committee	Member	2015/2016
➤ ABET Re-Accreditation Committee	Member	2015/2016
➤ Department Annual Plan Committee	Member	2015/2016
➤ The American Society of Highway Engineers (UCF Chapter)		
• <b>President</b>		(2014–2015)
• Treasurer		(2012 –2013)
• Risk Management		(2010 –2011)
➤ The Institute of Transportation Engineers (Ite),		
• Member		(2010 – 2015)
➤ The International Road Federation		
• Member (UCF membership)		(2010 – 2015)
➤ The American Society of Civil Engineers (ASCE)		
• Member		(2012 – 2015)

### Funded research projects (Completed):

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#### Researcher:

- Validation and Application of Highway Safety Manual (part C & D) in Florida. Phase I.
- Validation and Application of Highway Safety Manual (part C & D) in Florida. Phase II.
- Synthesis of Visibility Detection Systems.
- Operational and Safety-Based Analysis of Varied Toll Lane Configurations.

### Funded Research Projects (Ongoing)

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No.	Title of the Research project	Participants	Statuses	Year
1	Climate Change Impact on Traffic Safety and Transportation System Performance in the UAE. <b>(AED 185,000 )</b>	<b>Muamer Abuzwidah (PI)</b> - Waleed Zeiada - Abdullah Yilmaz - Khaled Hamad - Abdallah Shanableh	<b>Ongoing</b>	2020-2023
2	Climate Change Impact on Materials Selection and Asphalt Pavement Performance in UAE. <b>(AED 200,000 )</b>	Waleed Zeiada - <b>Muamer Abuzwidah</b> - Abdullah Yilmaz - Abdallah Shanableh	<b>Ongoing</b>	2020-2023
3	Assessment of the Lane Chang maneuvers' impact on Safety and Operation on the Freeways and development of Innovative Solutions for Improvements. <b>(80,000 AED)</b>	<b>Abuzwidah, M., Hamad, K., Abdalla, S.</b>	<b>Ongoing</b>	2021-2023
4	Initiation of the Development of a Highway Safety Manual for the UAE. <b>(80,000 AED)</b>	<b>Abuzwidah, M., Hamad, K., Abdalla, S.</b>	<b>Ongoing</b>	2021-2023
5	Evaluation of the Roads and Parking Design to Improve Traffic Safety and Operation in the University City of Sharjah. <b>(40,000 AED)</b>	<b>Abuzwidah, M. (PI), Hamad, K., Zeiada, W., and Omar, M.</b>	<b>Ongoing</b>	2021-2023

No.	Title of the Research project	Participants	Status	Year
6	Developing Travel Demand Forecasting Model for Sustainable Sharjah University City. Competitive Research Grant.  (80,000 AED)	Khaled Hamad, <b>Muamer Abuzwidah</b> , and Emad Mushtaha	<b>Completed</b>	2018-2020

### **Master Thesis(Completed):**

<b>Ahmed El-Awadi</b> “Assessment of Traffic Safety and Operation of Connected and Autonomous Vehicles During Adverse Weather Conditions” (May 2022). <b>(Main Supervisor)</b> .
<b>Sham Mirou</b> “Impact of Potential Climate Change on Asphalt Pavement Performance in the UAE” (May 2022). <b>(Co-supervised with Dr. Waleed Zeiada)</b>
<b>Nafisa Kaisari</b> “Assessment of Adverse Weather Impacts on Traffic Safety in the UAE” (Dec 2021). <b>(Main Supervisor)</b> .
<b>Fawzi Mehdawi</b> “The Gap and its Reduction Between Theory and Reality of Construction Schedules in the UAE. (Dec 2020). <b>(Main Supervisor)</b> .
<b>Abdulsalam Birawi</b> “Evaluation and Modeling of Traffic Safety in Dubai”. (May 2019). <b>(Main Supervisor)</b>
<b>Mariam Al-Hmoudi</b> ; “Evaluation and Modeling of Pedestrian Safety in the Emirate of Sharjah” (January 2017). <b>(Main Supervisor)</b> :
<b>Reem Hassan</b> “Impact of Potential Climate Change on Asphalt Binder Performance Grade for Roads Construction in the UAE” (Dec 2021) <b>(Co-supervised with Dr. Waleed Zeiada)</b>
<b>Islam Al-Ali</b> “Comparing the Performance of Artificial Neural Networks and Random Forests Models for Predicting Incident Duration” (December 2017). <b>(Co-supervised with Dr. Khaled Hamad)</b>

### **Master Thesis (Approved Thesis Proposals) Expect to Graduate Spring 2023/2024 Semester:**

<b>Abdulrauf Khetrish</b> “Development of Multi-Resolution Modeling Framework for Traffic Safety Assessment” (May 2022). <b>(Main Supervisor)</b> .
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## Selected Journal and Book Chapters Publications

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1. Naeem, M., Alotaibi, E., Elbaz, Y., **Abuzwidah, M.**, & Barakat, S. (2023). Assessment of Drowsy Driving Associated Characteristics Using Deep Learning. In International Symposium on Engineering and Business Administration. International Symposium on Engineering and Business Administration. Trans Tech Publications Ltd. <https://doi.org/10.4028/p-vrat6i>
2. Khetrish, A., **Abuzwidah, M.**, & Barakat, S. (2023). Modeling Crash Frequency Using Crash and Geometric Data at Freeways. In International Symposium on Engineering and Business Administration. International Symposium on Engineering and Business Administration. Trans Tech Publications Ltd. <https://doi.org/10.4028/p-hq3aty>
3. Elawady, A., **Abuzwidah, M.**, Barakat, S., & Lee, J. Y. (2023). Predicting Traffic Accidents Severity Using Multiple Analytical Techniques. In International Symposium on Engineering and Business Administration. International Symposium on Engineering and Business Administration. Trans Tech Publications Ltd. <https://doi.org/10.4028/p-i7bq7v>
4. Khalil, M., Shabib, A., Feroz, S., & **Abuzwidah, M.** (2023). Modeling Lane-Choice Behavior and Public Willingness to Pay for HOT Lanes: A Neural Network Approach. In International Symposium on Engineering and Business Administration. International Symposium on Engineering and Business Administration. Trans Tech Publications Ltd. <https://doi.org/10.4028/p-u1g3rh>
5. Mahmoud, N., Abdel-Aty, M., Cai, Q., **Abuzwidah, M.** “Analyzing the Difference Between Operating Speed and Target Speed Using Mixed-Effect Ordered Logit Model” *Journal of Transportation Research Record* 2022. Volume 2676 Pages 596–607.
6. Fares, M.Y., **Abuzwidah, M.** “Traffic Delay Evaluation and Simulating Sustainable Solutions for Adjacent Signalized Roundabouts” *Sustainable Civil Infrastructures* 2022. Volume 3413 Pages 303-314.
7. Hassan, R.N., Zeiada, W.A., **Abuzwidah, M.**, Mirou, S.M., Ashour, A.G. “Investigation of Historical and Future Air Temperature Changes in the UAE” *Sustainable Civil Infrastructures* 2022. Volume 3413 Pages 1148-1166.
8. Shabib, A., Khalil, M., **Abuzwidah, M.** “Assessment of the Potential Implementation of High-Occupancy Toll Lanes on the Major Freeways in the United Arab Emirates” *Sustainable Civil Infrastructures* 2022. Volume 3413 Pages 897-911.
9. Mahmoud, N., Abdel-Aty, M., Cai, Q., **Abuzwidah, M.**, “Analyzing the Difference Between Operating Speed and Target Speed Using Mixed-Effect Ordered Logit Model”. Accepted for publication in *Journal of Transportation Research Record*, Jan 2022.
10. **Abuzwidah, M.**, Abdel-Aty, M. “Crash Risk Analysis of Different Designs of Toll Plazas” *Journal of Safety Science*. Volume 107- Pages 77-84- Published August 2018.



11. **Abuzwidah, M.**, Abdel-Aty, M. “Safety Assessment of the Conversion of Toll Plazas to All-Electronic Toll Collection System” in *Journal of Accident Analysis and Prevention*.2015. Vol. 80, pp. 153–161/ 2015
12. **Abuzwidah, M.**, Abdel-Aty, M., and Ahmed, M. “Safety Evaluation of Hybrid Mainline Toll Plazas”. *Journal of the Transportation Research Board, in press*. No.2435 DC: 2014, pp.53-60, DDI: 10.3141/2435-07, 2014.
13. Ahmed, M., Abdel-Aty, M., Qi, S., **Abuzwidah, M.** “Synthesis of State-of-the-Art in Visibility Detection Systems' Applications and Research” in *Journal of Transportation Safety & Security* 01/2014; 6(3). DOI: 10.1080/19439962.2013.824055, 2014.
14. **Abuzwidah, M.**, Abdel-Aty, M. “Safety Evaluation of the Open Road Tolling System” in *Libyan Journal of Traffic Safety*, 2014. Pp.30-36.
15. Baig, F.; **Abuzwidah, M.**; Lee, J.; Zhang, J.; Byon, Y.; " The COVID-19 Impacts on Mobility Behavior in the United Arab Emirates” Waiting for Final Decision in the *Journal of Transportation Research Record*, 2023.
16. **Abuzwidah, M.**, Abdel-Aty, M. “Traffic Safety Assessment of the High Occupancy Toll Lanes System” submitted to *Journal of Accident Analysis and Prevention* 2023.

### Selected Conference Publications

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1. S. M. Mirou, A. T. Elawady, A. G. Ashour, W. Zeiada and M. **Abuzwidah**, "Visibility Prediction through Machine Learning: Exploring the Role of Meteorological Factors," *2023 Advances in Science and Engineering Technology International Conferences (ASET)*, Dubai, United Arab Emirates, 2023, pp. 1-6, doi: 10.1109/ASET56582.2023.10180539.
2. M **Abuzwidah**, A Elawady, W Zeiada, R Al Ali, R Al Samahi, S Aflatoon, H Aflatoon “Rainfall Change Projections under Different Climate Change Scenarios in UAE” Qatar University Press 2023.
3. W Zeiada, S Mirou, A Ashour, R Hassan, M **Abuzwidah** “ Development of Climate Data Inputs Towards the Implementation of Mechanistic-Empirical Pavement Design in the UAE” Qatar University Press 2023.
4. Ashour, A.G., Mirou, S.M., Hassan, R.N., **Abuzwidah**, M., Shanableh, A. “Assessment of Potential Temperature Increases in The UAE due to Future Global Warming. 2022 Advances in Science and Engineering Technology International Conferences, ASET. 2022.
5. El Traboulsi, Y., Khalifa, I., **Abuzwidah**, M., Al-Ruzouq, R., Hamad, K. “Effect of COVID-19 Lockdown on Traffic-related Air Pollution in Florida, USA”. 2022 Advances in Science and Engineering Technology International Conferences, ASET. 2022.



6. Khalifa, I., Traboulsi, Y.E., **Abuzwidah, M.** “ Spatiotemporal Investigation of Intersection Crashes in Victoria, Australia”. 2022 Advances in Science and Engineering Technology International Conferences, ASET. 2022.
7. Elawady, A., **Abuzwidah, M.**, Zeiada, W. “The Benefits of Using Connected Vehicles System on Traffic Delay and Safety at Urban Signalized Intersections” 2022 Advances in Science and Engineering Technology International Conferences, ASET. 2022.
8. Elawady, A., Alotaibi, E., Mostafa, O., **Abuzwidah, M.** “Predicting Number of Casualties During Accidents Using Machine Learning” 2022 Advances in Science and Engineering Technology International Conferences, ASET. 2022.
9. Elawady, A., **Abuzwidah, M.**, Zeiada,W. “The Benefits of Using Connected Vehicles System on Traffic Delay and Safety at Urban Signalized Intersections”. Advances in Science and Engineering Technology International Conferences, ASET **2022**.
10. Gamal, A., Mirou, S., Hassan, R., Zeiada, W., **Abuzwidah, M.**, Shanableh, A., “Assessment of Potential Temperature Increases in The UAE due to Future Global Warming”. Advances in Science and Engineering Technology International Conferences, ASET **2022**.
11. El Traboulsi, Y., Khalifa, I., **Abuzwidah, M.**, Shanableh, A., Al-Ruzouq, R., Hamad, K., “Effect of COVID-19 Lockdown on the Traffic-Related Air Pollution in Florida, USA”. Advances in Science and Engineering Technology International Conferences, ASET **2022**.
12. Khalifa, I., El-Traboulsi, Y., **Abuzwidah, M.**, “Spatiotemporal investigation of intersection crashes in Victoria, Australia”. Advances in Science and Engineering Technology International Conferences, ASET **2022**.
13. Elawady, A., Alotaibi, E., Mostafa, O., **Abuzwidah, M.**, Predicting Number of Casualties During Accidents Using Machine Learning. Advances in Science and Engineering Technology International Conferences, ASET **2022**.
14. Ahmed Elawady; **Muamer Abuzwidah**; Jaeyoung Lee: “The Benefits of Using Connected Vehicles on Traffic Delay and Safety at Urban Signalized Intersections” Presented at 18<sup>th</sup> IRF World Meeting & Exhibition. Dubai, **Nov 2021**.
15. Mahmoud Khalil., Ahmed Shabib., **Muamer Abuzwidah**.; “Assessment of The Potential Implementation of High-Occupancy Toll Lanes on The Major Freeways in The United Arab Emirates” Presented at 18th IRF World Meeting & Exhibition. Dubai, **Nov 2021**.
16. Mahmoud Khalil., Ahmed Shabib., **Muamer Abuzwidah**.; “Modeling Lane-Choice Behavior and Public Willingness to Pay for HOT Lanes: A Neural Network Approach” Presented at 18<sup>th</sup> IRF World Meeting & Exhibition. Dubai, **Nov 2021**.
17. Mohamad Yaman Fares; **Muamer Abuzwidah**; “Traffic Delay Evaluation and Simulating Sustainable Solutions for Adjacent Signalized Roundabouts”. Presented at 18th IRF World Meeting & Exhibition. Dubai, **Nov 2021**.
18. Elawady, A., **Abuzwidah, M.**, Zeiada,W. “ Examine the Impact of Using Connected Vehicles on Traffic Delay at Signalized Intersections” Presented at Transportation Research Board (**Jan - 2021**)

19. Nafisa Kaisari.; **Muamer Abuzwidah**.; Ahmed Elawady “Adverse Weather Impact on Driver Performance in the UAE” Presented at International Symposium in Engineering and Business Administration. Sharjah, **April 2021**.
20. Ahmed Elawady.; **Muamer Abuzwidah**.; Samer Barakat.; Jaeyoung Lee “Predicting Traffic Accidents Severity Using Multiple Analytical Techniques”. Presented at International Symposium in Engineering and Business Administration. Sharjah, **April 2021**.
21. Abdulsalam Birawi.; **Muamer Abuzwidah**.; Khalid Hamad “Evaluation and Modeling of Fatal Traffic Crashes using Multiple Analytical Technique”. Presented at International Symposium in Engineering and Business Administration. Sharjah, **April 2021**.
22. Abdulrauf Khetrish.; **Muamer Abuzwidah**.; Samer Barakat “Modeling Crash Frequency Using Crash and Geometric Data at Freeways”. Presented at International Symposium in Engineering and Business Administration. Sharjah, **April 2021**.
23. Marwan Naeem.; Yousef Elbaz.; Emran Alotaibi.; **Muamer Abuzwidah**. “Assessment of Drowsy Drivers’ Associated Characteristics Using Deep Learning”. Presented at International Symposium in Engineering and Business Administration. Sharjah, **April 2021**.
24. Kaisari, N., **Abuzwidah, M.**, Elawady, A., Zeiada,W. “The Impact of Adverse Weather Condition on the Driver performance “. International Conference on Communications, Computing, Cybersecurity, and Informatics (CCCI) – **Oct, 2020**
25. **Abuzwidah M.**, Balwan M., Abdel-Aty M., Al-Kateeb G. “Traffic Safety Benefits of Using Highway Lighting Technology: (Case Study: 4-Lanes Expressways in the Rural Areas). (**2020**) Conference of Materials Science and Engineering, South Korea.
26. Najah A., **Abuzwidah M.**, Khalil D. “The impact of the rear seat belt use on traffic safety in the UAE. Advances in Science and Engineering Technology International Conferences, ASET **2020**.
27. Elawady A., Khetrish A., **Abuzwidah M.** “Driver behaviors' impacts on traffic safety at the intersections”. Advances in Science and Engineering Technology International Conferences, ASET **2020**.
28. Mehdawi, F., **Abuzwidah M.** “The Gap and its Reduction Between Theory and Reality of Construction Schedules in the UAE”. Virtual Conference on Engineering and Technology (ViCET **2020**)
29. Shabib A., Khalil M., **Abuzwidah M.**, Barakat S. “Public perception and willingness to pay for high-occupancy toll (HOT) lanes in the United Arab Emirates: Questionnaire-based survey”. Advances in Science and Engineering Technology International Conferences, ASET **2020**.
30. Elbaz Y., Naeem M., **Abuzwidah M.**, Barakat S. “Effect of Drowsiness on Driver Performance and Traffic Safety”. Advances in Science and Engineering Technology International Conferences, ASET **2020**.
31. **Abuzwidah, M.**, Abdel-Aty, M. “Effects of Using High Occupancy Toll Lanes on Safety Performance of Freeways” presented in 96th Transportation Research Board Conference, No 17-06894\_IN01.2017.
32. **Abuzwidah, M.**, Abdel-Aty, M. “Modelling of Traffic Safety of Traditional Mainline Toll Plazas”. Presented at The International Conference on Advances in Sustainable Construction Materials & Civil Engineering Systems (ASCMCES-17). Sharjah, UAE, 2017.

33. Mariam, A., **Abuzwidah, M.**, Hamad, K., “Road Users' Opinion about Pedestrian Safety in the Emirate of Sharjah, UAE- Survey Results”. Presented at The International Conference on Advances in Sustainable Construction Materials & Civil Engineering Systems (ASCMCES-17). Sharjah, UAE, 2017.
34. Venkatachalam, S., Hamad, K., Abu Dabous, S., **Abuzwidah, M.**, “An Investigative Study on the Student Performance on Multiple Choice Exams with Multiple Versions in Engineering Economics Course”. Presented at the International Forum on Engineering Education. Sharjah, UAE, 2017.
35. **Abuzwidah, M.**, Abdel-Aty, M. “Traffic Safety Assessment of Traditional Mainline Toll Plazas on Expressways” in the 2015 Road Safety & Simulation International Conference. October, 2015.
36. **Abuzwidah, M.**, Abdel-Aty, M. “Safety Evaluation of All-Electronic Toll Collection System” in Conference: 94th Transportation Research Board, No 15-2700, 2015.
37. **Abuzwidah, M.**, Abdel-Aty, M. “Traffic Safety Evaluation and Modeling of Toll Collection Systems” in Conference: 94th Transportation Research Board, No 15-2711, 2015.
38. **Abuzwidah, M.**, Abdel-Aty, M. “Safety Evaluation of the Open Road Tolling System” in 2ed Libyan Conference of Traffic Safety, 2014.
39. **Abuzwidah, M.**, Abdel-Aty, M., and Ahmed, M. “Safety Evaluation of Hybrid Open Road Tolling Plazas” in Conference: 92nd Transportation Research Board, No 14-3788, 2014.
40. Ahmed, M., Abdel-Aty, M., Qi, S., **Abuzwidah, M.** “Synthesis of State-of-the-Art in Visibility Detection Systems' Applications and Research, “in Conference: 92nd Transportation Research Board, No 13-0832, 2013.

#### PH.D. Dissertation:

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##### Civil Engineering (Transportation Track)

- ★ **Abuzwidah, M.** “Traffic Safety Assessment of Different Toll Collection Systems on Expressways Using Multiple Analytical Techniques.” Ph.D. Dissertation. Orlando, University of Central Florida., 2014.

#### Master Thesis:

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##### Civil Engineering (Transportation Track)

- ★ **Abuzwidah, M.** “Evaluation and Modeling of the Safety of Open Road Tolling System” M.S. Thesis. Orlando, University of Central Florida., 2011.

#### Selected Research Publications (Technical Reports):

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- 1- **Project Report 1:** Evaluating Toll Plazas and Visibility Conditions Using Driving (April 2015).
- 2- **Project Report 2:** Validation and application of highway safety manual in Florida (May 2014).
- 3- **Project Report 3:** Synthesis of Visibility Detection Systems (October 2012).

## Selected Presentations

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- Presentations in the Gulf Traffic Events at the University of Sharjah - 2015/2016 to 2019/2020.
- Toll Road Safety Experience in Florida: Seminar with visitor scholar from University of Cypress and the University of Central Florida, Orlando January 2015.
- Operational and Safety-Based Analysis of Varied Toll Lane Configurations Using Florida data:
- Safer-Sim Symposium on Traffic Safety at the University of Massachusetts Amherst, 2014.
- Effect of Traffic safety on the society and the economy: Seminar with American Society of Highway Engineers (UCF Chapter), September 2014.
- Effect of driver age on traffic safety of expressway: Seminar with American Society of Highway Engineers (UCF Chapter), Orlando 2014.
- Benefit of devolving specific Florida's Highway Safety Manual using Florida data: Seminar with traffic safety office at Florida Department of Transportation, at the University of Central Florida, 2014.
- Safety Evaluation of Open Toll Roads: Seminar with visitor scholar from Ajou University, South Korea at the University of Central Florida, January 2014.
- Validation and Application of the Highway Safety Manual using Florida data: Seminar with visitor scholar from Tongji University, China, at the University of Central Florida, 2014.

## FACULTY DEVELOPMENT

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### Activity

- All distance learning related workshops that were offered by the UoS.
- I was one of the "Faculty Advising Champions" that attended all sessions during spring 2020/2021 organized by NACADA and the Institute of Leadership in Higher Education
- Most events offered by the Office of Vice Chancellor for Research & Graduate Studies.
- Technical Exchange Meeting with Police.
- Second Research Cafe Talk offered by the Office of Vice Chancellor for Research & Graduate Studies.
- First Research Cafe Talk offered by the Office of Vice Chancellor for Research & Graduate Studies.
- Research & Innovation, Breaking the Barrier, Thinking Outside the Box Events.
- The Innovation Management Workshop.
- University Instructions in granting promotion to faculty members' workshop.
- Participated in the Advising Workshop for Engineering College.
- Participated in the blended learning workshop organized by the Institute of Leadership in Higher Education.
- Blackboard Collaborate Sessions & Meetings regarding McGraw-Hill Connect.
- Blackboard Collaborate Ultra workshops.
- Course Design Workshop, organized by the Institute of Leadership in Higher Education.

- I participated in the Faculty Development Workshops on Technology Enhanced Teaching and Learning.
- I participated in the discussed ideas in the 2nd Teaching & Learning Forum. My idea of dissection was about how to explore controversies and find common ground on how to engage and empower students and teachers in developing their learning and teaching.
- I participated in the dissection by the Department Advisory Board and discuss the Curriculum improvement.
- Following the outcome of the 2019 European Learning & Teaching Forum.
- Member of the University Road Safety Committee (Assessment of Curriculum Highway Safety Analysis Course).
- Organized seminar for graduate and undergraduate students about traffic safety research and education.
- Attended several Faculty Development Programs in the Continuous Education Center and Professional Development (UOS)
- Attending several seminars and presentations
- Contributing in Online Webinars

### **Reviewer for Multiple Scientific Journals**

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I am serving as a reviewer for different scientific journals, including but not limited to, Accident Analysis and Prevention, Journal of Transportation Research Record, Journal of Safety Science, and the Journal of Safety Research. As well as a reviewer for multiple transportation-related conferences.

### **Honors & Awards**

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- ✓ Received the 10th Cycle Sharjah Sustainability Award for Outstanding Scientific Research.
- ✓ Received University of Sharjah Annual Incentive Award for Teaching.
- ✓ Received the 11<sup>th</sup> Dubai Award for Sustainable Transport - Best Academic Research Category, Road Transport Authority, Dubai Government.
- ✓ Received “Faculty Advising Champions” certificate from NACADA and the Institute of Leadership in Higher Education.
- ✓ Received the Acknowledgement Certificate for contribution to the University of Sharjah's achievement of Silver Rating in the Sustainability Tracking and Rating System (STARS).
- ✓ My master's student Abdulrauf Khetrish and I received the best paper presentation at the International Symposium in Engineering and Business Administration titled “Modeling Crash Frequency Using Crash and Geometric Data at Freeways”.

- ✓ My master's student Abdulsalam Birawi and I received the best paper presentation in the International Symposium in Engineering and Business Administration titled “Evaluation and Modeling of Fatal Traffic Crashes using Multiple Analytical Technique”.
- ✓ My colleagues in the Sustainability Office and I prepared the UoS file and applied for the “Sharjah Sustainability Award and our University won 1<sup>st</sup> place.
- ✓ My colleagues and I prepared the UoS file and applied for the “RTA Dubai - Best Academic Institution Supportive of Sustainability Award” and our University won 1st place.

Thank you