

**Curriculum Vitae**  
**Eren Erman Ozguven**

July 14, 2024

**General Information**

University address: Resilient Infrastructure and Disaster Response (RIDER) Center  
Civil and Environmental Engineering  
FAMU-FSU College of Engineering  
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**Professional Preparation**

2012            Doctoral Degree, RUTGERS THE STATE UNIVERSITY OF NEW JERSEY. Major: Civil and Environmental Engineering. Emergency Planning and Humanitarian Logistics. Supervisor: Kaan Ozbay.

Ozguven, E. E. (2012). *A Secure and Efficient Inventory Management System for Disasters*. Unpublished doctoral dissertation, RUTGERS THE STATE UNIVERSITY OF NEW JERSEY. Retrieved from <http://dx.doi.org/doi:10.7282/T3BV7FJ1/>.

2006            Master's Degree, BOGAZICI UNIVERSITY. Major: Industrial Engineering. Port Planning and Statistics. Supervisor: Kuban Altinel.

Ozguven, E. E. (2006). *Optimum Quay Length Determination Using Inventory and Stochastic Models*. Unpublished master's thesis, BOGAZICI UNIVERSITY.

2002            Bachelor's Degree, BOGAZICI UNIVERSITY. Major: Civil Engineering. Structures. Supervisor: Cem Yalcin.

## **Professional Experience**

- 2023–present Associate Director, Rural Equitable and Accessible Transportation (REAT) Center, FAMU-FSU College of Engineering.
- 2023–present Co-Director, Innovative Bridge Technologies/Accelerated Bridge Construction University Transportation Center (IB, FAMU-FSU College of Engineering/Florida International University. FAMU-FSU College of Engineering PI.
- 2019–present Director, Resilient Infrastructure and Disaster Response (RIDER) Center, FAMU-FSU College of Engineering.
- 2019–present Associate Professor, Civil and Environmental Engineering, Florida State University.
- 2013–2019 Assistant Professor, Civil and Environmental Engineering, Florida State University.
- 2012 Post-Doctoral Research Associate, Civil and Environmental Engineering, Rutgers University.
- 2006–2012 Graduate Research Assistant, Civil and Environmental Engineering, Rutgers University.
- 2005 Project Engineer, Design, ORIENT RESEARCH Consulting Engineers.
- 2003–2004 Project Engineer, Design, TANCON Construction and Consulting.
- 2002–2003 Project Engineer, Seismic Assessment, DITEK Earthquake and Engineering.

## **Honors, Awards, and Prizes**

Nominee, Graduate Teaching Award, Florida State University (2020).  
Faculty Innovation Award, IBM (2018). (\$20,000).

## **Fellowship(s)**

Transportation Coordinating Council/Federal Transit Administration Fellowship (2009–2010).

## **Current Membership in Professional Organizations**

American Society of Civil Engineers  
Emerging Design and Construction Technologies Committee (Transportation Research Board)  
IEEE Intelligent Transportation Systems Society  
INFORMS  
Institute of Transportation Engineers  
Transportation Research Part D Editorial Board

## **Teaching**

My interest in teaching stems from a deep enthusiasm in interacting with students and contributing to their learning process. It has been a very pleasurable and rewarding experience to see the students grow as future thinkers and decision makers through their education at the FAMU-FSU College of Engineering since I joined the college in January 2013. I also believe that an academic life in engineering provides the opportunity of combining research and teaching by encouraging the students into real-life applications while teaching classes at the same time. These applications directly enable students to engage in research ultimately feeding some aspects of that research back into the classroom. Since I joined the College of Engineering, I have taught one undergraduate course and three graduate courses in the fields of transportation engineering, statistics, systems analysis and economics. During this period, I have successfully created an online graduate course (EGN 5458: Statistical Applications for Engineers), which serves as the mathematics requirement for the department. I have been teaching this course since 2013 with an enrollment of at least 15 students. This has been a course that attracted not only Civil and Environmental Engineering students but also students from other engineering disciplines (Mechanical, Biomedical, Industrial and Electrical Engineering) as well as the science departments (Applied Mathematics). I have also developed and taught two new transportation-focused graduate courses, TTE 5305: Transportation Systems Analysis, and TTE 5501: Transportation Economics, which have strengthened the department's graduate program by giving the MS and PhD students the chance to broaden their advanced knowledge and skills in the area of transportation engineering. Transportation Systems Analysis course has also attracted students from the Department of Urban Planning. I have received consistently good evaluations from students over the last five years, typically over 84% of very good/excellent reviews (Excellent (59%), Very Good (%25), Good (%9), Fair (%7)).

## **Courses Taught**

Statistical Applications for Engineers (EGN5458)  
Directed Individual Study (CGN5905)  
Transportation Economics (TTE5501)  
Preliminary Exam Preparation (CGN6960)  
Transportation Systems Analysis (TTE5305)  
Civil Engineering Seminar (CGN5935)  
Introduction to Geomatics Engineering Lab (CEG2202L)  
Sp. Top:Trans. Economics (CGN5930)  
Statistical Applications (CGN5930)  
Emission Analysis (CGN5905)  
Traffic Simulation w/VISSIM (CGN5905)  
Transportation Engineering (TTE3004)  
Sp. Top:Trans. Sys. Analysis (CGN5930)  
Directed Individual Study (CGN5930)

Sp. Top:Statistical Applications for Engineers (CGN5930)

### **New Course Development**

Transportation Economics (2015)  
Transportation Systems Analysis (2015)  
Statistical Applications for Engineers (2013)

### **Doctoral Committee Chair**

Koloushani, M., graduate. (2023).  
Karaer, A., graduate. (2022).  
Ghorbanzadeh, M., graduate. (2021).  
Ulak, M. B., graduate. (2018).  
Kocatepe, A., graduate. (2017).  
Antwi, R. B., doctoral candidate.  
Kaya, M. B., doctoral candidate.  
Takyi, S. Y., doctoral candidate.  
Fulari, S. G., doctoral student.

### **Doctoral Committee Cochair**

Yang, J., graduate. (2023).  
Chen, M., graduate. (2020).  
Konila Sriram, L. M., graduate. (2020).  
Khayamim, R., doctoral candidate.

### **Doctoral Committee Member**

Alinejad, N., graduate. (2024).  
Elmi, Z., graduate. (2023).  
Alzahrani, A., graduate. (2023).  
Vijayan, L., graduate. (2022).  
Brown, K., graduate. (2022).  
Singh, P., graduate. (2022).  
Cole, N., graduate. (2021).  
Pasha, J., graduate. (2020).  
Giroux, R. R., graduate. (2020).  
Ruhazwe, E., graduate. (2020).  
Abioye, O., graduate. (2019).  
Kakareko, G., graduate. (2019).  
Kavoosi, M., graduate. (2019).

Masaki, J., graduate. (2019).  
Cordova Guillen, J. D., graduate. (2019).  
Gilanifar, M., graduate. (2019).  
Kidando, E. Y., graduate. (2019).  
Mafi, S., graduate. (2019).  
Twumasi-Boakye, R., graduate. (2018).  
Alabdouli, K., graduate. (2015).  
Mtoi, E. T., graduate. (2015).  
Abazari, S., doctoral candidate.  
Li, B., doctoral candidate.  
Pakdehi, M., doctoral candidate.  
Taheri, A., doctoral candidate.  
Yan, Z., doctoral candidate.  
Elliott, S., doctoral student.

### **Doctoral Committee University Representative**

Kirtonia, S., graduate. (2023).  
Kim, K., graduate. (2023).  
Oh, S. H., graduate. (2023).  
Saxena, S., graduate. (2023).  
Ojo, O., graduate. (2022).  
Toshon, T. A., graduate. (2022).  
Xu, K., graduate. (2021).  
Bush, A., doctoral candidate.  
Duzgun, C., doctoral candidate.  
Islam, M. M., doctoral candidate.  
Jiang, A., doctoral candidate.  
Ohlsen, T. M., doctoral candidate.  
Owais, S., doctoral candidate.  
Shohan, M. J. A., doctoral candidate.

### **Master's Committee Chair**

Burns, S., graduate. (2020).  
Li, W., graduate. (2020).  
Karabag, H. H., graduate. (2019).  
Ozel, H., graduate. (2015).  
Vemulapalli, S. S., graduate. (2015).

**Master's Committee Cochair**

McDugle, R., graduate. (2018).  
Omidvar, A., graduate. (2016).

**Master's Committee Member**

Rapolu, S., graduate. (2023).  
Ahmadi, M. S., graduate. (2022).  
Meriga, V. K., graduate. (2022).  
Pinto, A. D., graduate. (2022).  
Rashid, M. M., graduate. (2022).  
Brown, K., graduate. (2018).  
Adegbulugbe, O., graduate. (2018).  
Kadeha, C. F., graduate. (2018).  
Sanusi, F., graduate. (2018).  
Theophilus, O. P., graduate. (2018).  
Baloglu, A., graduate. (2018).  
Chen, M., graduate. (2017).  
Chityala, S., graduate. (2017).  
Xu, R., graduate. (2016).  
Masaki, J. E., graduate. (2016).  
Vasquez Maldonado, P. G., graduate. (2016).  
Manske, A. S., student.  
Purkayastha, S., student.  
Tagnan, J. N., student.  
Kineru, A., student. [University of North Florida]

**Supervision of Student Research Not Related to Thesis or Dissertation**

Chang, A. (Sep 2019–Apr 2020).  
Acebes del Castillo, Volga (Sep 2018–Apr 2019).  
Mank, E. (Sep 2018–Apr 2019).  
Byrd, M. (Sep 2016–Mar 2017).  
Brown, N. (Aug 2015–May 2016).  
Pennington, M. (Sep 2014–May 2016).

## **Guest Lecturer**

Ozguven, E. E. (2009–2012). *Transportation engineering related software (CUBE, TransCAD, Paramics, MATLAB) teaching*. Rutgers University.

## **Research and Original Creative Work**

The objective of my research studies is to establish a nationally and internationally recognized multi-disciplinary program that contributes to the problem of providing accessible, safe and smart transportation for the whole segments of the population, which is one of the grand challenges of our modern age. The path to such resilient transportation operations is inherently complex and multi-dimensional, and lies at the boundary between various fields of science and engineering. As such, I have established an integrated research and education program that strives to address ever growing mobility, safety, accessibility and resiliency problems in the context of smart infrastructure and cities. I have been focusing on investigating the relationships, interdependencies and dependencies among different infrastructure networks in the State of Florida, utilizing my academic research in transportation engineering, and background in industrial engineering and optimization. This investigation focuses on the simultaneous and interdependent movements of people including the vulnerable populations such as aging people, and the commodities and services that meet their needs. During this process, I have established long-lasting multi-disciplinary collaborations with researchers from psychology, sociology, public policy, communications, urban planning, geography, civil, electrical and industrial engineering, and created a research program which draws from various engineering and science methods including optimization, econometrics, statistical analysis, human factors, machine learning, traffic and transportation engineering and geography. As a PI and Co-PI, I was able to secure grants from the U.S. Department of Transportation (\$4,209,600), National Science Foundation (A total of \$733,122) and Florida Department of Transportation (A total of \$928,455). I am also a member of the Tier 1 University Transportation Center (Center for Accessibility and Safety for an Aging Population-ASAP Center) and the Traffic Engineering Laboratory, and I am the associate director for the Collaborative Intelligent Infrastructure Laboratory (CI2 Lab) at the FAMU-FSU College of Engineering. I am also affiliated with the Institute for Successful Longevity, an internationally recognized research center at the Florida State University.

## **Program of Research and/or Focus of Original Creative Work**

My general research interests include emergency transportation operations, modeling of transportation networks, transportation accessibility and safety, connected vehicles, intelligent transportation systems, smart cities and urban mobility. These research directions are critical not only for the department and the university but also for the State of Florida, nationally and internationally, as my research also focuses on the transportation safety and accessibility needs of at-risk or vulnerable populations such as the aging demographic.

## **Publications**

### **Refereed Journal Articles**

Antwi, R., Kimollo, M., Takyi, S., Ozguven, E. E., Sando, T., Moses, R., & Dulebenets, M. (2024). Turning Features Detection from Aerial Images: Model Development and Application on Florida's Public Roadways. *Smart Cities*, 7(3), 1414-1440. Retrieved from <https://www.mdpi.com/2624-6511/7/3/59> doi:10.3390/smartcities7030059

- Li, B., Afkhami, P., Khayamim, R., Elmi, Z., Moses, R., Sobanjo, J., Ozguven, E. E., & Dulebenets, M. (2024). A Holistic Optimization-based Approach for Sustainable Selection of Level Crossings for Closure with Safety, Economic, and Environmental Considerations. *Reliability Engineering and System Safety*, 249, Article 110197. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0951832024002709> doi:10.1016/j.ress.2024.110197
- Antwi, R., Takyi, S., Karaer, A., Ozguven, E. E., Moses, R., Dulebenets, M., & Sando, T. (2024). Detecting School Zones on Florida's Public Roadways Using Aerial Images and Artificial Intelligence (AI2). *Transportation Research Record*, 2678(4), 622-636. Retrieved from <https://journals.sagepub.com/doi/full/10.1177/03611981231185771> doi:10.1177/03611981231185771
- Alam, S., Kim, K., Horner, M., Alisan, O., Antwi, R., & Ozguven, E. E. (2024). Large-scale modeling of hurricane flooding and disrupted infrastructure impacts on accessibility to critical facilities. *Journal of Transport Geography*, 116, Article 103852. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0966692324000619> doi:10.1016/j.jtrangeo.2024.103852
- Kim, K., Horner, M., Alam, S., Alisan, O., Ghorbanzadeh, M., & Ozguven, E. E. (2024). Understanding Changes in Spatial Accessibility to Restaurants During the COVID-19 Pandemic: Disentangling Closures, Inequity, Neighborhood, and Transportation Mode. *Geographical Analysis*, 56(2), 244-264. Retrieved from <https://onlinelibrary.wiley.com/doi/10.1111/gean.12378> doi:10.1111/gean.12378
- Antwi, R., Okai, S., Quaye-Ballard, J., & Ozguven, E. E. (2024). Geospatial Analysis of Fuel and Gas Station Distribution: Evaluating the Compliance and Impact of Station Siting on Public Health and Safety in Kumasi, Ghana. *Computational Research in Applied Science and Engineering*, 10(1), Article 2885. Retrieved from <https://crpase.com/archive/CRPASE-Vol-10-issue-01-44156262.pdf> doi:10.61186/crpase.10.1.2885
- Ulak, B., & Ozguven, E. E. (2024). Identifying the latent relationships between factors associated with traffic crashes through graphical models. *Accident Analysis and Prevention*, 197, Article 107470. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0001457524000150> doi:10.1016/j.aap.2024.107470
- Safaeian, M., Moses, R., Ozguven, E. E., & Dulebenets, M. (2024). An optimization-based risk management framework with risk interdependence for effective disaster risk reduction. *Progress in Disaster Science*, 21, Article 100313. Retrieved from <https://www.sciencedirect.com/science/article/pii/S2590061724000036> doi:doi.org/10.1016/j.pdisas.2024.10031
- Kaya, M. B., Alisan, O., Karaer, A., & Ozguven, E. E. (2024). Assessing Tornado Impacts in the State of Kentucky with a Focus on Demographics and Roadways Using a GIS-Based

- Approach. *Sustainability*, 16(3), Article 1180. Retrieved from <https://www.mdpi.com/2071-1050/16/3/1180> doi:10.3390/su16031180
- Alam, S., Horner, M., Ozguven, E. E., Ventimiglia, B., & Smith, D. (2024). Understanding People's Safety Perceptions During a Recent Evacuation: The Case of Hurricane Ian (2022). *Findings*. Retrieved from <https://findingspress.org/article/91268-understanding-people-s-safety-perceptions-during-a-recent-evacuation-the-case-of-hurricane-ian-2022> doi:10.32866/001c.91268
- Barrett, A., Mimbs, H., Koloushani, M., Ozguven, E. E., Soulie, B., Noblitt, J., & Michael, C. (2024). Using golf carts as a transportation mode: Who does it? *Transportation Research Interdisciplinary Perspectives*, 23, Article 101003. Retrieved from <https://www.sciencedirect.com/science/article/pii/S2590198223002506> doi:10.1016/j.trip.2023.101003
- Koloushani, M., Abazari, S., Khayamim, R., Vanli, A., Ozguven, E. E., Moses, R., Giroux, R., & Jacobs, B. (2023). Developing Economic Loss-Based Thresholds for Improving Context-Specific Crash Prediction Models. *Transportation Research Record*, 2677(12), 631-646. Retrieved from <https://journals.sagepub.com/doi/full/10.1177/03611981231169273> doi:10.1177/03611981231169273
- Vijayan, L., Huang, W., Ma, M., Ozguven, E. E., Yang, J., & Alisan, O. (2023). Rapid simulation of storm surge inundation for hurricane evacuation in Florida by multi-scale nested modeling approach. *International Journal of Disaster Risk Reduction*, 99, Article 104134. Retrieved from <https://www.sciencedirect.com/science/article/pii/S2212420923006143> doi:doi.org/10.1016/j.ijdr.2023.104134
- Safaeian, M., Khayamim, R., Ozguven, E. E., & Dulebenets, M. (2023). Sustainable decisions in a ridesharing system with a tri-objective optimization approach. *Transportation Research Part D*, 125, Article 103958. Retrieved from <https://www.sciencedirect.com/science/article/pii/S1361920923003553> doi:doi.org/10.1016/j.trd.2023.103958
- Abazari, S., Vanli, A., Alisan, O., & Ozguven, E. E. (2023). Understanding spatiotemporal variation of social vulnerabilities from longitudinal hurricane-pandemic data: A multilevel model of the Covid-19 pandemic during hurricane Sally in Florida. *International Journal of Disaster Risk Reduction*, 98, Article 104095. Retrieved from <https://www.sciencedirect.com/science/article/pii/S2212420923005757> doi:doi.org/10.1016/j.ijdr.2023.104095
- Koloushani, M., Abazari, S., Vanli, A., Ozguven, E. E., Moses, R., Giroux, R., & Jacobs, B. (2023). Determination of Optimal Spatial Sample Sizes for Fitting Negative Binomial-Based Crash Prediction Models with Consideration of Statistical Modeling

- Assumptions. *Sustainability*, 15(20), Article 14731. Retrieved from <https://www.mdpi.com/2071-1050/15/20/14731> doi:10.3390/su152014731
- Takyi, S., Antwi, R., Ozguven, E. E., Alisan, O., Ghorbanzadeh, M., Mardis, M., & Jones, F. (2023). Measuring spatial accessibility of public libraries using floating catchment area methods: A comparative case study in Calhoun County, Florida. *Transportation Research Interdisciplinary Perspectives*, 22, Article 100944. Retrieved from <https://www.sciencedirect.com/science/article/pii/S2590198223001914> doi:10.1016/j.trip.2023.100944
- Koloushani, M., Ghorbanzadeh, M., Ozguven, E. E., & Ermagun, A. (2023). A conceptualization of the spatial relationship associated with school-related crashes: a case study in Northwest Florida. *Transportation Planning and Technology*, 6(6), 795-817. Retrieved from <https://www.tandfonline.com/doi/full/10.1080/03081060.2023.2229306> doi:10.1080/03081060.2023.2229306
- Alisan, O., Ulak, B., Ozguven, E. E., & Horner, M. (2023). Location selection of field hospitals amid COVID-19 considering effectiveness and fairness: A case study of Florida. *International Journal of Disaster Risk Reduction*, 93, Article 103794. Retrieved from <https://www.sciencedirect.com/science/article/pii/S2212420923002741> doi:10.1016/j.ijdr.2023.103794
- Yang, J., Alisan, O., Ma, M., Ozguven, E. E., Huang, W., & Vijayan, L. (2023). Spatial Accessibility Analysis of Emergency Shelters with a Consideration of Sea Level Rise in Northwest Florida. *Sustainability*, 15(13), Article 10263. Retrieved from <https://www.mdpi.com/2071-1050/15/13/10263> doi:10.3390/su151310263
- Koloushani, M., Kaya, M., Karaer, A., & Ozguven, E. E. (2023). Investigating the Probability of Potential Actions Performed by Drivers Experiencing Daytime Sun Glare-Induced Blindness. *Transportation Research Record*, 2676(12), 599-614. Retrieved from <https://journals.sagepub.com/doi/abs/10.1177/03611981221096433> doi:10.1177/03611981221096433
- Huang, W., Ma, M., Vijayan, L., Ozguven, E. E., Ghorbanzadeh, M., Yang, J., & Yang, Z. (2023). Improving the accuracy of hurricane wave modeling in Gulf of Mexico with dynamically-coupled SWAN and ADCIRC. *Ocean Engineering*, 274, Article 114044. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0029801823004286> doi:10.1016/j.oceaneng.2023.114044
- Gazzea, M., Karaer, A., Ghorbanzadeh, M., Ozguven, E. E., & Arghandeh, R. (2023). Roadway Vulnerability Assessment against Hurricanes Using Satellite Images. *Transportation Research Record*, 2677(3), 1453-1464. Retrieved from <https://journals.sagepub.com/doi/full/10.1177/03611981221124593> doi:10.1177/03611981221124593

- Karaer, A., Kaczmarek, W., Mank, E., Ghorbanzadeh, M., Koloushani, M., Dulebenets, M., Moses, R., Sando, T., & Ozguven, E. E. (2023). Traffic Data on-the-Fly: Developing a Statewide Crosswalk Inventory Using Artificial Intelligence and Aerial Images (AI2) for Pedestrian Safety Policy Improvements in Florida. *Data Science for Transportation*, 7, Article 7. Retrieved from <https://link.springer.com/article/10.1007/s42421-023-00070-1>  
doi:10.1007/s42421-023-00070-1
- Alisan, O., Tuydes-Yaman, H., & Ozguven, E. E. (2023). Tabu-Search-Based Combinatorial Subset Selection Approach to Support Investigation of Built Environment and Traffic Safety Relationship. *Transportation Research Record*, 2677(2), 588-609. Retrieved from <https://journals.sagepub.com/doi/abs/10.1177/03611981221108161>  
doi:10.1177/03611981221108161
- Gazzea, M., Miraki, A., Alisan, O., Kuglitsch, M., Pelivan, I., Ozguven, E. E., & Arghandeh, R. (2023). Traffic Monitoring System Design Considering Multi-Hazard Disaster Risks. *Scientific Reports*, 13, Article 4883. Retrieved from <https://www.nature.com/articles/s41598-023-32086-6> doi:10.1038/s41598-023-32086-6
- Yang, J., Vijayan, L., Ghorbanzadeh, M., Alisan, O., Ozguven, E. E., Huang, W., & Burns, S. (2023). Integrating storm surge modeling and accessibility analysis for planning of special-needs hurricane shelters in Panama City, Florida. *Transportation Planning and Technology*, 46(2), 241-261. Retrieved from <https://www.tandfonline.com/doi/full/10.1080/03081060.2022.2162053>  
doi:10.1080/03081060.2022.2162053
- Koloushani, M., Karaer, A., Ozguven, E. E., Sando, T., Dulebenets, M., & Moses, R. (2023). Investigating Spatial Correlations between Land Use and Pedestrian Injury Severity in Crashes Occurring away from Intersections in Northwest Florida. *Transportation Research Record*, 2676(12), 1-x. Retrieved from <https://journals.sagepub.com/doi/full/10.1177/03611981221096433>  
doi:10.1177/03611981221096433
- Ulak, B., Ozguven, E. E., Horner, M., Weaver, L., Puente, J., Crute, J., Smith, D., Duncan, M., & Whitton, E. (2022). Ridership Dynamics and Characteristics of Potential Riders of a Transit System: The SunRail of Central Florida. *Transportation Research Interdisciplinary Perspectives*, 16, Article 100720. Retrieved from <https://www.sciencedirect.com/science/article/pii/S2590198222001804>  
doi:10.1016/j.trip.2022.100720
- Yang, J., Vijayan, L., Ghorbanzadeh, M., Alisan, O., Huang, W., Ozguven, E. E., & Burns, S. (2022). Effects of the Uncertainty of Hurricane Tracks on Coastal Hazards and Evacuations. *International Journal of Structural and Civil Engineering Research*, 11(4), 99-107. Retrieved from <http://www.ijscer.com/uploadfile/2022/1104/20221104031236353.pdf>  
doi:10.18178/ijscer.11.4.99-107

- Gazzea, M., Kristensen, L., Pirotti, F., Ozguven, E. E., & Arghandeh, R. (2022). Tree Species Classification Using High-Resolution Satellite Imagery and Weakly-Supervised Learning. *IEEE Transactions on Geoscience and Remote Sensing*, *60*, 1-11. Retrieved from <https://ieeexplore.ieee.org/document/9905623> doi:10.1109/TGRS.2022.3210275
- Ghorbanzadeh, M., Koloushani, M., Ozguven, E. E., Vanli, A., & Arghandeh, R. (2022). City Transportation Network Vulnerability to Disasters: The Case of Hurricane Hermine in Florida. *Environmental Hazards*, *21*(3), 199-217. Retrieved from <https://www.tandfonline.com/doi/full/10.1080/17477891.2021.1933885> doi:10.1080/17477891.2021.1933885
- Brown, K., Moses, R., & Ozguven, E. E. (2022). Analysis of Pedestrian Crashes with a View Towards Mitigation by Connected Vehicle Technologies. *Global Journal of Engineering Sciences*, *9*(5). Retrieved from <https://irispublishers.com/gjes/pdf/GJES.MS.ID.000724.pdf> doi:10.33552/GJES.2022.09.000724
- Kyusik, K., Ghorbanzadeh, M., Horner, M., & Ozguven, E. E. (2022). Assessment of Disparities in Spatial Accessibility to Vaccination Sites in Florida. *Annals of GIS*, *28*(3), 263-277. Retrieved from <https://www.tandfonline.com/doi/full/10.1080/19475683.2022.2026474> doi:10.1080/19475683.2022.2026474
- Koloushani, M., Ghorbanzadeh, M., Gray, N., Raphael, P., Ozguven, E. E., Charness, N., Yazici, A., Boot, W., Eby, D., & Molnar, L. (2022). Older Adults' Concerns Regarding Hurricane-induced Evacuations during COVID-19: Questionnaire Findings. *Transportation Research Interdisciplinary Perspectives*, *15*, Article 100676. Retrieved from <https://www.sciencedirect.com/science/article/pii/S2590198222001361> doi:10.1016/j.trip.2022.100676
- Ulak, M. B., Madhavi, K. S. L., Kocatepe, A., Arghandeh, R., & Ozguven, E. E. (2022). Resilience Characterization for Multi-Layer Infrastructure Networks. *IEEE Intelligent Transportation Systems Magazine*, *14*(4), 121-132. Retrieved from <https://ieeexplore.ieee.org/document/9381552> doi:10.1109/MITS.2021.3049368
- Singh, P., Pasha, J., Moses, R., Sobanjo, J., Ozguven, E. E., & Dulebenets, M. (2022). Development of Exact and Heuristic Optimization Methods for Safety Improvement Projects at Level Crossings under Conflicting Objectives. *Reliability Engineering and System Safety*, *220*, Article 108296. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S0951832021007675> doi:10.1016/j.ress.2021.108296
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### Presentations

#### Refereed Papers at Conferences

- Takyi, S., Antwi, R., Koloushani, M., & Ozguven, E. E. (presented 2023, October). *A Spatial Analysis of Traffic, Speeding, and Proximity to Critical Facilities: A Case Study in the*

- State of Florida*. Paper presented at Transportation Research Board's 2024 Annual Meeting, Transportation Research Board, Washington, DC. (International)
- Yang, J., Alisan, O., Vijayan, L., Huang, W., & Ozguven, E. E. (presented 2023, October). *Critical Shelter Analysis in Northwest Florida Using Social Vulnerability and Accessibility Based on Uncertain Hurricane Tracks*. Paper presented at Transportation Research Board's 2024 Annual Meeting, Transportation Research Board, Washington, DC. (International)
- Antwi, R., Takyi, S., Karaer, A., Ozguven, E. E., Moses, R., Dulebenets, M., & Sando, T. (presented 2023, October). *GIS-based Automatic Crosswalk Change Detection Framework from Bi-temporal High Resolution Aerial Images*. Paper presented at Transportation Research Board's 2024 Annual Meeting, Transportation Research Board, Washington, DC. (International)
- Antwi, R., Takyi, S., Ozguven, E. E., Volcy, K., Alam, S., Kim, K., Horner, M., & Mardis, M. (presented 2023, October). *Satellite Imagery-based Hurricane Debris Assessment in Calhoun County, Florida*. Paper presented at Transportation Research Board's 2024 Annual Meeting, Transportation Research Board, Washington, DC. (International)
- Yang, J., Alisan, O., Ma, M., Vijayan, L., Huang, W., & Ozguven, E. E. (presented 2023, October). *Spatial Accessibility of Hurricane Shelters: A Case Study of Hurricane Michael with Sea Level Rise Consideration*. Paper presented at Transportation Research Board's 2024 Annual Meeting, Transportation Research Board, Washington, DC. (International)
- Yang, J., & Ozguven, E. E. (presented 2023, October). *Spatial Accessibility to Shelters Report: A Case Study of Hurricane Irma*. Paper presented at Transportation Research Board's 2024 Annual Meeting, Transportation Research Board, Washington, DC. (International)
- Koloushani, M., Ghorbanzadeh, M., Ozguven, E. E., & Ermagun, A. (presented 2023, January). *A Conceptualization of the Spatial Relationship Associated with School-Related Crashes: A Case Study in Northwest Florida*. Paper presented at Transportation Research Board's 2023 Annual Meeting, Transportation Research Board, Washington, DC. (International)
- Alam, S., Kim, K., Horner, M., Alisan, O., Antwi, R., & Ozguven, E. E. (presented 2023, January). *An Analysis of Post-Hurricane Flooding and Disrupted Accessibility to Critical Facilities during Hurricane Irma: Estimating the State-wide Impacts in Florida*. Paper presented at Transportation Research Board's 2023 Annual Meeting, Transportation Research Board, Washington, DC. (International)
- Antwi, R., Takyi, S., Karaer, A., Ozguven, E. E., Moses, R., Dulebenets, M., & Sando, T. (presented 2023, January). *Detecting School Zones on Florida's Public Roadways Using Aerial Images and Artificial Intelligence*. Paper presented at Transportation Research Board's 2023 Annual Meeting, Transportation Research Board, Washington, DC. (International)

- Koloushani, M., Abazari, S., Khayamim, R., Vanli, A., Ozguven, E. E., Moses, R., Giroux, R., & Jacobs, B. (presented 2023, January). *Developing Economic Loss-Based Thresholds for Improving Context-Specific Crash Prediction Models*. Paper presented at Transportation Research Board's 2023 Annual Meeting, Transportation Research Board, Washington, DC. (International)
- Singh, P., Elmi, Z., Khayamim, R., Pasha, J., Moses, R., Sobanjo, J., Ozguven, E. E., & Dulebenets, M. (presented 2023, January). *Implementation of Safety Improvement Projects at Level Crossings via Multi-Objective Optimization*. Paper presented at Transportation Research Board's 2023 Annual Meeting, Transportation Research Board, Washington, DC. (International)
- Koloushani, M., Kaya, M., Karaer, A., & Ozguven, E. E. (presented 2023, January). *Investigating the Probability of Potential Actions Performed by Drivers Experiencing Daytime Sun Glare-Induced Blindness*. Paper presented at Transportation Research Board's 2023 Annual Meeting, Transportation Research Board, Washington, DC. (International)
- Yang, J., Vijayan, L., Alisan, O., Ghorbanzadeh, M., Huang, W., Ozguven, E. E., & Burns, S. (presented 2023, January). *Planning for Special Needs Shelters: A Hurricane Track Uncertainty-Based Approach Integrating Coastal Inundation and Accessibility*. Paper presented at Transportation Research Board's 2023 Annual Meeting, Transportation Research Board, Washington, DC. (International)
- Kyusik, K., Horner, M., Alisan, O., Alam, S., Ozguven, E. E., & Ghorbanzadeh, M. (presented 2023, January). *Understanding Changes in Spatial Accessibility to Restaurants during the COVID-19 Pandemic: Disentangling Closures, Inequity, and Mode Choices*. Paper presented at Transportation Research Board's 2023 Annual Meeting, Transportation Research Board, Washington, DC. (International)
- Alisan, O., Tuydes-Yaman, O., & Ozguven, E. E. (presented 2022, January). *A Tabu-Search-Based Combinatorial Subset Selection Approach to Support Investigation of Built Environment and Traffic Safety Relationship*. Paper presented at Transportation Research Board's 2022 Annual Meeting, Transportation Research Board, Washington, DC, USA. (International)
- Koloushani, M., Karaer, A., Ozguven, E. E., Sando, T., Dulebenets, M., & Moses, R. (presented 2022, January). *Assessing the Spatial Correlation between Land Use and Injury Severity of Pedestrian-Involved Crashes that Do Not Occur at Intersections: A Network-based Case Study in Northwest Florida*. Paper presented at Transportation Research Board's 2022 Annual Meeting, Transportation Research Board, Washington, DC, USA. (International)
- Dulebenets, M., Pasha, J., Singh, P., Moses, R., Sobanjo, J., & Ozguven, E. E. (presented 2022, January). *Estimation of Traffic Delays due to Application of Countermeasures at Level Crossings: A Case Study for the State of Florida*. Paper presented at Transportation

Research Board's 2022 Annual Meeting, Transportation Research Board, Washington, DC, USA. (International)

Ghorbanzadeh, M., Vijayan, L., Yang, J., Ozguven, E. E., Huang, W., & Ma, M. (presented 2022, January). *Integrating Evacuation and Storm Surge Modeling Considering Potential Hurricane Tracks: The Case of Hurricane Irma in Southeast Florida*. Paper presented at Transportation Research Board's 2022 Annual Meeting, Transportation Research Board, Washington, DC, USA. (International)

Karaer, A., Chen, M., Gazzea, M., Ghorbanzadeh, M., Abichou, T., Arghandeh, R., & Ozguven, E. E. (presented 2022, January). *Remote Sensing based Comparative Damage Assessment of Historical Storms in Northwestern Florida*. Paper presented at Transportation Research Board's 2022 Annual Meeting, Transportation Research Board, Washington, DC, USA. (International)

Sobanjo, J., Ozguven, E. E., & Ghorbanzadeh, M. (presented 2022, January). *Resilience of Major Florida Roadways to Hurricanes based on Traffic Incident Data*. Paper presented at Transportation Research Board's 2022 Annual Meeting, Transportation Research Board, Washington, DC, USA. (International)

Gazzea, M., Karaer, A., Ghorbanzadeh, M., Ozguven, E. E., & Arghandeh, R. (presented 2022, January). *Satellite-based Hurricane Risk Assessment for Roadways via Vegetation 3D Modeling and Building Detection*. Paper presented at Transportation Research Board's 2022 Annual Meeting, Transportation Research Board, Washington, DC, USA. (International)

Tenney, C., Leonarczyk, Z., Ghorbanzadeh, M., Jones, F., Mardis, M., Ozguven, E. E., & Alsalmi, H. (presented 2021, September). *A GIS-Based Analysis for Transportation Accessibility, Disaster Preparedness, and Rural Libraries' Roles in Community Resilience*. Paper presented at Association of Library and Information Science Education (ALISE) 2021 Conference, Association of Library and Information Science Education (ALISE), Virtual Event. (National)

Kyusik, K., Ghorbanzadeh, M., Horner, M., & Ozguven, E. E. (presented 2021, August). *Assessment of Disparities in Spatial Accessibility to Vaccination Sites in Florida*. Paper presented at WSTLUR Symposium on Transport and Land use Research, World Society for Transport & Land Use Research, Virtual Event. (International)

Burns, S., Vijayan, L., Ghorbanzadeh, M., Ozguven, E. E., & Huang, W. (presented 2021, January). *Assessing the Vulnerability of Florida Panhandle Communities Impacted by Hurricane Michael: A Geographical Information Systems-based Analysis*. Paper presented at Transportation Research Board's 2021 Annual Meeting, Transportation Research Board, Virtual Event. (International)

Koloushani, M., Ghorbanzadeh, M., Ozguven, E. E., Ermagun, A., & Ulak, B. (presented 2021, January). *How Did COVID-19 Affect Crash Patterns in Florida? A GIS-based*

*Spatiotemporal Investigation in Four Counties*. Paper presented at Transportation Research Board's 2021 Annual Meeting, Transportation Research Board, Virtual Event. (International)

Karaer, A., Ulak, B., Abichou, T., Arghandeh, R., & Ozguven, E. E. (presented 2021, January). *Leveraging Remote Sensing Indices for Hurricane-induced Vegetative Debris Assessment: A GIS-based Case Study for Hurricane Michael*. Paper presented at Transportation Research Board's 2021 Annual Meeting, Transportation Research Board, Virtual Event. (International)

Gazzea, M., Karaer, A., Balafkan, N., Ozguven, E. E., & Arghandeh, R. (presented 2021, January). *Post-hurricanes Roadway Closure Detection using Satellite Imagery and Semi-supervised Ensemble Learning*. Paper presented at Transportation Research Board's 2021 Annual Meeting, Transportation Research Board, Virtual Event. (International)

Ghorbanzadeh, M., Kyusik, K., Ozguven, E. E., & Horner, M. (presented 2021, January). *Spatial Accessibility Assessment of COVID-19 Patients to Healthcare Facilities: A Case Study in Florida*. Paper presented at Transportation Research Board's 2021 Annual Meeting, Transportation Research Board, Virtual Event. (International)

Ghorbanzadeh, M., Burns, S., Vijayan, L., Ozguven, E. E., & Huang, W. (presented 2021, January). *Spatiotemporal Analysis of Highway Traffic Patterns in Hurricane Evacuation: A Case Study of Hurricane Irma in Florida*. Paper presented at Transportation Research Board's 2021 Annual Meeting, Transportation Research Board, Virtual Event. (International)

Kidando, E., Kitali, A., Kutela, B., Karaer, A., Ghorbanzadeh, M., Koloushani, M., Moses, R., Ozguven, E. E., & Sando, T. (presented 2021, January). *Use of Real-time Traffic and Signal Timing Data in Modeling Occupant Injury Severity at Signalized Intersections*. Paper presented at Transportation Research Board's 2021 Annual Meeting, Transportation Research Board, Virtual Event. (International)

Koloushani, M., Ghorbanzadeh, M., Ulak, M., Ozguven, E. E., & Horner, M. (presented 2020, August). *Examining Spatial Patterns of Youth-Involved Crashes around University Campuses in Florida*. Paper presented at Bridging Transportation Researchers (BTR) Online Conference, Bridging Transportation Researchers (BTR), Online. (International) Retrieved from <https://bridgingtransport.org/>

Kidando, E., Karaer, A., Kutela, B., Kitali, A., Moses, R., Ozguven, E. E., & Sando, T. (presented 2020, January). *A Novel Approach for Calibrating Freeway Highway Multi-regimes Fundamental Diagram*. Paper presented at Transportation Research Board's 2020 Annual Meeting, Transportation Research Board, Washington, D.C. (International)

Kavoosi, M., Dulebenets, M., Pasha, J., Abioye, O., Moses, R., Sobanjo, J., & Ozguven, E. E. (presented 2020, January). *An Optimization Approach for Selection of Countermeasures*

- to Improve Safety at the Highway-Rail Grade Crossings in Florida*. Paper presented at Transportation Research Board's 2020 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Chen, M., Karaer, A., Ozguven, E. E., Abichou, T., Arghandeh, R., & Nienhius, J. (presented 2020, January). *Developing City-wide Hurricane Risk Maps using Real-life Data on Infrastructure, Vegetation and Weather: A GIS-based Case Study in Northwest Florida*. Paper presented at Transportation Research Board's 2020 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Chitiyala, S., Sobanjo, J., Ozguven, E. E., Sando, T., & Twumasi-Boakye, R. (presented 2020, January). *Driver Behavior at a Freeway Merge in Mixed Traffic of Conventional and Connected-Autonomous Vehicles*. Paper presented at Transportation Research Board's 2020 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Karabag, H., Ulak, M. B., Mjogolo, F., Kidando, E., Ozguven, E. E., Sando, T., & Moses, R. (presented 2020, January). *Estimating the Impact of Green Light Optimized Speed Advisory (GLOSA) on Exhaust Emissions through the Integration of VISSIM and MOVES*. Paper presented at Transportation Research Board's 2020 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Pasha, J., Dulebenets, M., Abioye, O., Kavooosi, M., Moses, R., Sobanjo, J., & Ozguven, E. E. (presented 2020, January). *Evaluation of the Accident and Hazard Prediction Models for Prioritization of the Highway-Rail Grade Crossing Safety Projects in Florida*. Paper presented at Transportation Research Board's 2020 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Alisan, O., Ghorbanzadeh, M., Ulak, M., Kocatepe, A., Ozguven, E. E., Horner, M., & Huang, W. (presented 2020, January). *Identifying Critical Hurricane Shelters and Alternatives in Case of Interdiction: A Case Study in Southeast Florida*. Paper presented at Transportation Research Board's 2020 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Ghorbanzadeh, M., Ozguven, E. E., Tenney, C., Leonarczyk, Z., Jones, F., & Mardis, M. (presented 2020, January). *Transportation Accessibility Assessment of Critical Facilities: A GIS-based Case Study in Northwest Florida Focusing on Libraries and Hospitals*. Paper presented at Transportation Research Board's 2020 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Ulak, M. B., Yazici, M. A., Ozguven, E. E., Vanli, A., & Arghandeh, R. (presented 2019, November). *Power Resilience Assessment from Physical and Socio-Demographic Perspectives*. Paper presented at 4th International Conference on System Reliability and Safety, IEEE, Rome, Italy. (International) Retrieved from <https://ieeexplore.ieee.org/document/8987673>

- Huang, W., Ozguven, E. E., Teng, F., Ginis, I., & Ullman, D. (presented 2019, November). *Rainfall Runoff and Flood Simulations for Hurricane Impacts on Woonasquatucket River, USA*. Paper presented at 2019 8th International Conference on Civil Engineering (ICCEN 2019), Hong Kong Chemical, Biological & Environmental Engineering Society (HKCBEEES), Paris, France. (International)
- Diwanji, V., Arpan, L., Ulak, M. B., Hou, J., & Ozguven, E. E. (presented 2019, November). *Revisiting Communication during Disasters: A Synchronicity-based, Mixed-methods Exploration using Survey and Geospatial Analysis*. Paper presented at NCA 105th Annual Convention, National Communication Association, Baltimore, MD, USA. (International)
- Ulak, M., Kocatepe, A., Ozguven, E. E., & Kumar, A. (presented 2019, January). *Are There More Pedestrian-involved Crashes around Bus Stops?: The Development of a Safety Index*. Paper presented at Transportation Research Board's 2019 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Sriram, L. K. S., Ulak, M., Ozguven, E. E., & Arghandeh, R. (presented 2019, January). *Casualty-based Combined Power and Transportation Resilience (Co-Resilience) during Hurricanes*. Paper presented at Transportation Research Board's 2019 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Ulak, M., Ozguven, E. E., Horner, M., Weaver, L., Puente, J., Crute, J., Smith, D., Duncan, M., & Whitton, E. (presented 2019, January). *Demographic and Socioeconomic Analysis of Potential Sunrail Transit System Riders in Orlando, Florida*. Paper presented at Transportation Research Board's 2019 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Dulebenets, M., Abioye, O., Pasha, J., Kavosi, M., Ozguven, E. E., Moses, R., Boot, W., & Sando, T. (presented 2019, January). *Development of Solution Algorithms for Efficient Emergency Evacuation Planning*. Paper presented at Transportation Research Board's 2019 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Kidando, E., Moses, R., Sando, T., & Ozguven, E. E. (presented 2019, January). *Disparity Effects Associated with Lateral Lane Locations and Days of the Week Influence on the Dynamic Transition of Traffic Conditions*. Paper presented at Transportation Research Board's 2019 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Ruhazwe, E., Moses, R., Kadeha, C., & Ozguven, E. E. (presented 2019, January). *Field Determination of Gap Acceptance Parameters for Florida Roundabouts*. Paper presented at Transportation Research Board's 2019 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Kadeha, C., Moses, R., Ruhazwe, E., & Ozguven, E. E. (presented 2019, January). *Influence of Exiting Vehicles on Roundabouts Gap Acceptance Parameters and Capacity: Method*

- Comparison*. Paper presented at Transportation Research Board's 2019 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Sanusi, F., Sobanjo, J., Ozguven, E. E., Sando, T., & Abdelrazig, Y. (presented 2019, January). *Measuring Impacts of Connected and Automated Vehicles on Freeway Work Zones*. Paper presented at Transportation Research Board's 2019 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Yazici, A., Almotahari, A., Fressynet, L., Leclercq, L., Kocatepe, A., & Ozguven, E. E. (presented 2019, January). *Spatio-Temporal Analysis of Congestion at Proposed Congestion Pricing Zone in New York City*. Paper presented at Transportation Research Board's 2019 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Hou, J., Tang, T., Catherine, A., Wu, Y., Arghandeh, R., & Ozguven, E. E. (presented 2018, November). *The Road toward Smart Cities: A Focus Group Study on Citizens' Perceptions and Use of Mobile Application for City Management*. Paper presented at 104th NCA Annual Convention, National Communication Association, Salt Lake City, UT. (International)
- Alisan, O., Tuydes-Yaman, H., Kocatepe, A., & Ozguven, E. E. (presented 2018, January). *Performance and Cost of Cross-County Collaboration in Special Needs Shelter (SpNS) Planning*. Paper presented at Transportation Research Board's 2018 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Kidando, E., Moses, R., Sando, T., & Ozguven, E. E. (presented 2018, January). *Probabilistic Inference and Prediction of Travel Time Reliability: Empirical Analysis of Associated Factors*. Paper presented at Transportation Research Board's 2018 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Twumasi-Boakye, R., Sobanjo, J., Inkoom, S., & Ozguven, E. E. (presented 2018, January). *Senior Community Resilience with a Focus on Critical Transportation Infrastructures: An Accessibility-based Approach to Healthcare*. Paper presented at Transportation Research Board's 2018 Annual Meeting, Transportation Research Board, Washington, D.C. (International)
- Omidvar, A., Ozguven, E. E., Vanli, A., & Tavakkoli-Moghaddam, R. (presented 2017, July). *A Two-Phase Safe Vehicle Routing and Scheduling Problem: Formulations and Solution Algorithms*. Paper presented at Transportation Science and Logistics Conference, INFORMS, Chicago, Illinois, USA. (International)
- Kocatepe, A., Ulak, M. B., Lores, J., Ozguven, E. E., & Yazici, M. A. (presented 2017, July). *Assessing the Factors that Affect the Public Engagement with Department of Transportation Twitter Accounts*. Paper presented at The International Symposium on Location-Based Social Media Data and Tracking Data, ICA Commission on Geospatial

- Analysis and Modeling & ICA Commission on Location-based Services, Washington, D.C., USA. (International)
- Moses, R., Kidando, E., Abdelrazig, Y., & Ozguven, E. E. (presented 2016, November). *Travel Time Reliability on Elderly Drivers Crash Severity*. Paper presented at 18th International Conference on Civil, Construction and Safety Engineering, World Academy of Science, Engineering and Technology, Singapore, SG. (International)
- Ozel, H., Ozguven, E. E., Kocatepe, A., & Horner, M. (presented 2016, January). *An Aging Population-focused Accessibility Assessment of Multi-modal Facilities in Florida*. Paper presented at Transportation Research Board 2016 Annual Meeting, Transportation Research Board, Washington, D.C., USA. (International)
- Omidvar, A., Vanli, A., Ozguven, E. E., Moses, R., Barrett, A., Kocatepe, A., Ozel, H., Gumber, C., & Sando, T. (presented 2016, January). *Effect of Traffic Patterns on the Frequency of Aging Driver-involved Highway Crashes: A Case Study on the Interstate-95 in Florida*. Paper presented at Transportation Research Board 2016 Annual Meeting, Transportation Research Board, Washington, D.C., USA. (International)
- Gumber, C., Barrett, A., Ozguven, E. E., Moses, R., Vanli, A., Kocatepe, A., Ozel, H., Omidvar, A., & Sando, T. (presented 2016, January). *Explaining Gender Differences in Self-regulated Driving: What Roles do Health Limitations and Transportation Alternatives Play?* Paper presented at Transportation Research Board 2016 Annual Meeting, Transportation Research Board, Washington, D.C., USA. (International)
- Marcelin, J. M., Horner, M., Ozguven, E. E., & Kocatepe, A. (presented 2016, January). *How Do Disaster Relief Needs Compare between Aging and the General Population? A Spatial Network Optimization Analysis of Hurricane Relief Facility Locations*. Paper presented at Transportation Research Board 2016 Annual Meeting, Transportation Research Board, Washington, D.C., USA. (International)
- Kocatepe, A., Lores, J., Ozguven, E. E., & Yazici, M. A. (presented 2016, January). *Measuring the Reach and Influence of DOT Twitter Accounts: A Case Study for Florida and New York*. Paper presented at Transportation Research Board 2016 Annual Meeting, Transportation Research Board, Washington, D.C., USA. (International)
- Abdelrazig, Y., Doczy, R., Boot, W., Ozguven, E. E., & Moses, R. (presented 2016, January). *Spatial Context Roadway Safety Analysis for the Aging Population: A Hybrid 3-Dimensional Visualization and Human Factors Simulation Approach*. Paper presented at Transportation Research Board 2016 Annual Meeting, Transportation Research Board, Washington, D.C., USA. (International) Retrieved from <https://trid.trb.org/view/1393475>

Giroux, R., Vanli, A., & Ozguven, E. E. (presented 2016, January). *Spatiotemporal Crash Rate Monitoring for Improving Highway Safety*. Paper presented at Transportation Research Board 2016 Annual Meeting, Transportation Research Board, Washington, D.C., USA. (International) Retrieved from <https://trid.trb.org/view/1394118>

### **Nonrefereed Papers at Conferences**

Karaer, A., Balafkan, N., Gazzea, M., Ghorbanzadeh, M., Arghandeh, R., & Ozguven, E. E. (presented 2021, June). *Evaluating the Relationship between Vehicle Travels and Carbon Monoxide (CO) Concentrations among Florida Counties under the impact of COVID-19 Precautions*. Paper presented at International Conference on Transportation & Development, American Society of Civil Engineers, Virtual Event. (International)

Gazzea, M., Karaer, A., Ghorbanzadeh, M., Balafkan, N., Ozguven, E. E., & Arghandeh, R. (presented 2021, June). *Post-Hurricanes Tree Debris Detection using Satellite Imagery and Deep-Learning*. Paper presented at International Conference on Transportation & Development, American Society of Civil Engineers, Virtual Event. (International)

Balafkan, N., Karaer, A., Ghorbanzadeh, M., Gazzea, M., Arghandeh, R., & Ozguven, E. E. (presented 2021, June). *Traffic Estimation Using Sentinel-5P and Historical Weather Data: A Remote Sensing Approach*. Paper presented at International Conference on Transportation & Development, American Society of Civil Engineers, Virtual Event. (International)

Burns, S., Ghorbanzadeh, M., & Ozguven, E. E. (presented 2019, October). *Geographical Information Systems-based Evacuation Analysis of Vulnerable Communities in the Florida Panhandle: A Case Study of Hurricane Michael*. Paper presented at Transportation Research Board's 99th Annual Meeting, Transportation Research Board, Washington, D.C. (International)

Asare-Akuffo, F., Mikaelian, L., Kim, K., Horner, M., Ozguven, E. E., & Ulak, M. (presented 2019, January). *Differential Accessibility to Primary Care Physicians: Analyzing the Spatial Structure of Health Opportunities*. Paper presented at Transportation Research Board's 2019 Annual Meeting, Transportation Research Board, Washington, D.C. (International)

Yildirim, M., & Ozguven, E. E. (presented 2019, January). *Toward Smarter Transportation in Developing Countries: An Assessment of the Successful Smart City Models Based on the Utilization of Big Transportation Data*. Paper presented at Transportation Research Board's 2019 Annual Meeting, Transportation Research Board, Washington, D.C. (International)

Deng, O., Mullings, A., Kovankaya, Y., Byrd, M., Ulak, M., Kocatepe, A., & Ozguven, E. E. (presented 2018, January). *Geographic Information System-Based Impact Analysis of Hurricane Hermine: Case Study in Tallahassee, Florida*. Paper presented at

Transportation Research Board's 97th Annual Meeting, Transportation Research Board, Washington, D.C. (International)

Bommineni, V., Zhou, V., Ponnaluri, S., Ulak, M. B., Kocatepe, A., & Ozguven, E. E. (presented 2017, January). *A GIS-based Comparative Livability Analysis between Florida Counties with a Focus on 65+ Cohort*. Paper presented at Transportation Research Board's 96th Annual Meeting, Transportation Research Board, Washington, D.C. (International)

Dyer, B., Callegari, N., Ulak, M. B., Ozel, H., & Ozguven, E. E. (presented 2016, January). *Evaluating Transportation Accessibility to Healthcare among Cancer Populations in Florida*. Paper presented at Transportation Research Board 2016 Annual Meeting, Transportation Research Board, Washington, D.C., USA. (International)

### **Nonrefereed Papers at Symposia**

Ozguven, E. E. (presented 2016, September). Integrated Assessment of Safety, Accessibility and Reliability for Aging Roadway Users: Case Studies in Florida. In David Eby, James Sayer, and Jack Hu (Chair), *Safe Transportation & Aging Symposium*. Symposium conducted at the meeting of Advancing Transportation Leadership and Safety (ATLAS), Ann Harbor, Michigan. (International)

### **Invited Keynote and Plenary Presentations at Conferences**

Ozguven, E. E. (presented 2012, February). *Case Study Based Evaluation of a Stochastic Multi-Commodity Emergency Inventory Management Model*. Plenary presentation at INFORMS New Jersey Chapter Meeting, INFORMS, New Brunswick, NJ. (State)

### **Invited Keynote and Plenary Presentations at Symposia**

Ozguven, E. E. (presented 2015, September). GIS-based Crash Analysis with a Focus on an Aging Population: A Case Study in Florida. Plenary presentation in *Safe Mobility for Life Coalition Winter Quarterly Meeting*. Symposium conducted at the meeting of Safe Mobility for Life Coalition, Tallahassee, Florida. (State)

### **Refereed Presentations at Conferences**

Rugminimamma, L., Huang, W., Ozguven, E. E., Yin, K., & Xu, S. (presented 2020, April). *Numerical Modeling of Storm Surges during Hurricane Michael in the Gulf of Mexico*. Presentation at 14. International Conference on Public Finance and Public Policy, ICPFPP, Rome, Italy. (International) Retrieved from <https://panel.waset.org/abstracts/119061>

- Kakareko, G., Jung, S., Ozguven, E. E., & Weresa, S. (presented 2017, March). *A New Approach for Road Closure Probability Estimation Caused By Hurricanes Winds*. Presentation at Engineering Mechanics Institute Conference, ASCE, San Diego, CA. (International)
- Horner, M., Ozguven, E. E., Marcelin, J. M., & Kocatepe, A. (presented 2015, November). *A Spatial Optimization Modeling Approach for Special Needs Shelter Placement Serving the Aging Population: A Florida Case Study*. Presentation at 62nd Annual North American Meetings of the Regional Science Association International, North American Regional Science Council, Portland, OR, USA. (National)
- Ozguven, E. E., Vanli, A., Barrett, A., Moses, R., Sando, T., Gumber, C., Kocatepe, A., Ozel, H., & Omidvar, A. (presented 2015, November). *Travel Time and Roadway Capacity Reliability for an Aging Population: The Development of a Model Integrating Roadway Traffic with Aging Adults' Driving Behavior*. Presentation at The Gerontological Society of America's 68th Annual Scientific Meeting, The Gerontological Society of America, Orlando, Florida. (International)
- Ulak, M. B., Ozguven, E. E., & Kocatepe, A. (presented 2015, October). *GIS-based Identification and Evaluation of Significant Factors for Aging-Involved Crashes*. Poster presentation at 2015 Road Safety & Simulation International Conference, Southeastern Transportation Center, Orlando, Florida. (International)
- Omidvar, A., Ozguven, E. E., Vanli, A., & Moses, R. (presented 2015, October). *Understanding the Factors Affecting Frequency and Severity of Aging-involved Accidents in Florida*. Poster presentation at 2015 Road Safety & Simulation International Conference, Southeastern Transportation Center, Orlando, Florida. (International)
- Kocatepe, A., Ozguven, E. E., & Moses, R. (presented 2014, October). *Evaluation of Multi-Modal Evacuation Operations in the Aftermath of a Disaster*. Presentation at 11th International Congress on Advances in Civil Engineering- ACE 2014, Istanbul Technical University, Istanbul, Turkey. (International)
- Ozguven, E. E., & Ozbay, K. (presented 2012, August). *An Integrated Inventory Management Framework for Emergency Operations*. Presentation at Second International Conference on Evacuation Modeling and Management, Northwestern University, Chicago, IL. (International)
- Ozbay, K., Li, J., Yazici, M. A., Iyer, S., Ozguven, E. E., Carnegie, J. A., & Bartin, B. (presented 2012, August). *Pseudodynamic Assignment for Evacuation Modeling Procedure*. Presentation at Second International Conference on Evacuation Modeling and Management, Northwestern University, Chicago, IL. (International)

### Nonrefereed Presentations at Conferences

- Ghorbanzadeh, M., Ozguven, E. E., Tenney, C., Leonarczyk, Z., Jones, F., & Mardis, M. (presented 2020, March). *Accessibility of Libraries and Hospitals in Northwest Florida: A GIS-based Analysis with a Focus on Hurricanes*. Presentation at University Transportation Center (UTC) Conference for the Southeastern Region, Florida Atlantic University, Boca Raton, FL. (State)
- Omidvar, A., Vanli, A., & Ozguven, E. E. (presented 2016, November). *Spatial-temporal Crash Severity Modeling For Aging-involved Crashes: A Case Of Interstate 95 In Florida*. Presentation at INFORMS Annual Meeting, INFORMS, Nashville, TN, USA. (International)
- Kocatepe, A., Ozguven, E. E., Ozel, H., & Horner, M. (presented 2016, March). *Aging-focused Transportation Accessibility Assessment of Emergency Shelters: A DTA-based Application in Florida*. Presentation at 2016 National Evacuation Conference, The University of New Orleans, New Orleans, LA. (National)
- Ozel, H., Ozguven, E. E., Kocatepe, A., & Ulak, M. B. (presented 2015, July). *Aging-focused Accessibility Assessment of Multi-modal Facilities towards Better Decision Making in Emergency Transportation Logistics*. Presentation at 27th European Conference on Operational Research, University of Strathclyde, Glasgow, UK. (International)
- Kocatepe, A., Ozguven, E. E., & Lores, J. (presented 2015, July). *Exploring the Social Network-based Feasibility of Cloud Services for Travel Time Reliability with a Focus on Aging People*. Presentation at 27th European Conference on Operational Research, University of Strathclyde, Glasgow, UK. (International)
- Ozel, H., Ozguven, E. E., & Kocatepe, A. (presented 2015, March). *A Spatial Analysis-based Approach for Airport Operations with a Focus on Aging Populations*. Poster presentation at University Transportation Center (UTC) Conference for the Southeastern Region, The University of Alabama at Birmingham and Mississippi State University, Birmingham, AL. (Regional)
- Kocatepe, A., Ozguven, E. E., Horner, M., & Marcelin, J. M. (presented 2015, March). *An Aging Population Focused Evaluation of Evacuation Operations with a GIS-based Application in Florida*. Poster presentation at University Transportation Center (UTC) Conference for the Southeastern Region, The University of Alabama at Birmingham and Mississippi State University, Birmingham, AL. (Regional)
- Vemulapalli, S. S., Ozguven, E. E., Sando, T., Abdelrazig, Y., & Moses, R. (presented 2015, March). *Analyzing Crash Clusters near Senior Destination Sites Using a GIS Approach*. Poster presentation at University Transportation Center (UTC) Conference for the Southeastern Region, The University of Alabama at Birmingham and Mississippi State University, Birmingham, AL. (Regional)

- Ulak, M. B., Ozguven, E. E., & Kocatepe, A. (presented 2015, March). *GIS-based Identification and Evaluation of Significant Factors for Aging-Involved Crashes*. Poster presentation at University Transportation Center (UTC) Conference for the Southeastern Region, The University of Alabama at Birmingham and Mississippi State University, Birmingham, AL. (Regional)
- Marcelin, J. M., Horner, M., Ozguven, E. E., & Kocatepe, A. (presented 2015, March). *How Do Disaster Relief Needs Compare between Aging and the General Population? A Spatial Network Optimization Analysis of Relief Facility Locations*. Poster presentation at University Transportation Center (UTC) Conference for the Southeastern Region, The University of Alabama at Birmingham and Mississippi State University, Birmingham, AL. (Regional)
- Ozguven, E. E., Horner, M., Kocatepe, A., Marcelin, J. M., Abdelrazig, Y., Sando, T., & Moses, R. (presented 2015, March). *Needs Assessment for Multi-Modal Emergency Transportation Operations with a Focus on an Aging Population*. Presentation at University Transportation Center (UTC) Conference for the Southeastern Region, The University of Alabama at Birmingham and Mississippi State University, Birmingham, AL. (Regional)
- Kocatepe, A., Ozguven, E. E., & Vanli, A. (presented 2014, November). *A Capacity and Travel Time Reliability Analysis on Transportation Networks for Emergency Operations*. Presentation at INFORMS Annual Meeting, INFORMS, San Francisco, USA. (International)
- Ozguven, E. E., & Ozbay, K. (presented 2014, November). *An Integrated Inventory Management Framework for Emergency Operations*. Presentation at INFORMS Annual Meeting, INFORMS, San Francisco, USA. (International)
- Giroux, R., Vanli, A., & Ozguven, E. E. (presented 2014, November). *Spatio-Temporal Monitoring for Highway Safety*. Presentation at INFORMS Annual Meeting, INFORMS, San Francisco, USA. (International)
- Ozguven, E. E., Horner, M., Kocatepe, A., Marcelin, J. M., Abdelrazig, Y., Sando, T., & Moses, R. (presented 2014, March). *Needs Assessment for Multi-Modal Emergency Transportation Operations with a Focus on an Aging Population*. Presentation at University Transportation Center (UTC) Conference for the Southeastern Region, The National Center for Transportation Systems Productivity and Management (NCTSPM), Atlanta, Georgia. (Regional)
- Ozguven, E. E. (presented 2011, January). *A Secure and Efficient Inventory Management System for Disasters*. Presentation at Doctoral Student Research in Transportation Modeling Workshop at the Transportation Research Board's 90th Annual Meeting, Transportation Research Board, Washington, D.C. (International)

Ozguven, E. E., & Ozbay, K. (presented 2009, October). *A Secure and Efficient Emergency Management System for Disasters*. Presentation at INFORMS 2009 Annual Meeting, INFORMS, San Diego, CA. (International)

Ozbay, K., Carnegie, J. A., Yazici, M. A., Ozguven, E. E., Bartin, B., & Li, J. (presented 2008, December). *Development of a Transportation Model for Planning Evacuations in Northern New Jersey*. Presentation at Eighth New Jersey Universities Homeland Security Research Consortium Symposium, Homeland Security, Princeton, NJ. (National)

### **Invited Workshops**

Ozguven, E. E. (2021, March). *AI for Smart Cities*. Workshop delivered at 2021 IEEE International Forum on Smart Grids for Smart Cities, ONLINE. (International)

Ozguven, E. E. (2021, February). *The resilience or the prevention: The chicken or the egg problem?* Workshop delivered at 4TU Resilience Engineering Center, ONLINE. (International)

Ozguven, E. E. (2018, April). *Smart and Connected Communities (S&CC) and Aging Population*. Workshop delivered at Stony Brook University - National Science Foundation, Stony Brook, NY. (International)

Ozguven, E. E. (2016, January). *Mobility and Accessibility for Post-Disaster Recovery: Social and Economic Resilience for Disadvantaged and Dislocated Populations*. Workshop delivered at Transportation Research Board 2016 Annual Meeting, Washington, D.C., USA. (International)

### **Invited Lectures and Readings of Original Work**

Ozguven, E. E., & Arghandeh, R. (2018, January). *Data from Science to Cities*. Delivered at Challenger Learning Center of Tallahassee, Challenger Learning Center, Tallahassee, FL. (Local)

Ozguven, E. E. (2011, December). *Analyzing Roadway Sections with respect to Traffic Capacity, Capacity Reliability and Emergency Evacuation Operations*. Delivered at Berkeley Transportation Systems, Berkeley, CA. (Local)

## **Information and Communication Technology**

### **Computer Software Development**

Ozbay, K., Ozguven, E. E., & Sertel, T. (2008). *Rutgers Intelligent Transportation Systems Inspection and Maintenance Software (RITSIMS)* [Computer software]. Trenton, NJ:

New Jersey Department of Transportation. Retrieved from  
<http://www.rits.rutgers.edu/RITSIMS>

## Contracts and Grants

### Contracts and Grants Funded

- Ozguven, Eren Erman (Co-PI), Yu, Weikuan (Co-PI), & Wang, Guang (PI). (Jul 2024–Jun 2027). *Collaborative Research: Frameworks: MobilityNet: A Trustworthy CI Emulation Tool for Cross-Domain Mobility Data Generation and Sharing towards Multidisciplinary Innovations*. Funded by National Science Foundation. (2411152). Total award \$370,000.
- Ozguven, E. E., Moses, R., Dulebenets, M., Sobanjo, J., Rambo-Roddenberry, M., & Guo, Q. (Jan 2024–Jul 2025). *FIU Tier 1 University Transportation Center*. Funded by Florida International University. Total award \$165,004.
- Ozguven, Eren Erman (PI). (Sep 2023–Aug 2025). *Multi Sensor Fusion for Proactive Commercial Motor Vehicle Safety at Work Zone*. Funded by University of Nebraska. (25-1121-0006-003). Total award \$225,000.
- Horner, Mark W (Co-PI), Mardis, Marcia A. (Co-PI), Ozguven, Eren Erman (PI), & Smith, Dennis J (Co-PI). (Aug 2023–Jul 2024). *Military Installation Resilience Review with Jacobs and ECRC*. Funded by Jacobs Engineering Group Inc. (148044729). Total award \$55,000.
- Coleman, Eric A (Co-PI), Ozguven, Eren Erman (Co-PI), Tang, Tian (Co-PI), & Wang, Guang (PI). (Jul 2023–Jun 2025). *SCS: A Socially Informed Electric Vehicle Promotion Framework for Rural Innovation towards Environmental, Social, and Economic Sustainability*. Funded by FSU. (None). Total award \$150,000.
- Ozguven, Eren Erman (PI). (Jun 2023–Dec 2024). *FAMU Tier 1 University Transportation Center (UTC) - Rural Equitable and Accessible Transportation (REAT) Center*. Funded by Florida A & M University. (C-5183). Total award \$247,139.
- Moses, Ren (PI), Ozguven, Eren Erman (Co-PI), Haiduc, Sonia (Co-PI), & Dulebenets, Maxim A. (Co-PI). (Feb 2023–Oct 2024). *Evaluation, Maintenance, and Evolution of the Traffic Polling & Analysis System*. Funded by Florida Department of Transportation. (BED30 / TO#977-06). Total award \$192,601.
- Moses, Ren (PI), Ozguven, Eren Erman (Co-PI), & Dulebenets, Maxim A. (Co-PI). (Feb 2023–Aug 2025). *Before and After Evaluation of Smart Bay Connected and Automated Vehicles (CAV) for Advanced Safety and Mobility Along US 98*. Funded by Florida Department of Transportation. (BDV30 / TO# 977-07). Total award \$340,000.

Moses, Ren (Co-PI), Vanli, Omer Arda (PI), & Ozguven, Eren Erman (Co-PI). (Oct 2022–May 2024). *Context-based Thresholds and Calibration Functions for Crash Prediction Models: Phase II Study*. Funded by Florida Department of Transportation. (BED30 / 945-001). Total award \$255,508.

Moses, Ren (Co-PI), Ozguven, Eren Erman (PI), & Dulebenets, Maxim A. (Co-PI). (Jun 2022–Jan 2024). *Identification and Performance Evaluation for Midblock Crosswalks Network Screening using Aerial Images and Artificial Intelligence (AI2)*. Funded by Florida Department of Transportation. (BED30-962-01). Total award \$198,651.

Sobanjo, John O (Co-PI), Moses, Ren (Co-PI), Ozguven, Eren Erman (Co-PI), & Dulebenets, Maxim A. (PI). (Jun 2022–Jun 2024). *Selection of Level Crossings for Closure in the State of Florida: An Optimization-based Approach*. Funded by Florida Department of Transportation. (BED30-977-04). Total award \$250,000.

Ozguven, Eren Erman (PI). (Apr 2022–Dec 2027). *Ozguven - PI Research Support*. Funded by FSU. (None). Total award \$3,297.

Moses, Ren (Co-PI), Ozguven, Eren Erman (PI), & Dulebenets, Maxim A. (Co-PI). (Mar 2022–Jan 2024). *Using Computer Vision and Deep Learning Techniques to Extract Roadway Geometry Features from Aerial Images*. Funded by Florida Department of Transportation. (BED30-977-02). Total award \$223,843.

Ozguven, Eren Erman (PI). (Jan 2022–Jul 2022). *Workshop on Moving Resilience Research and Practice in the Gulf Region*. Funded by University of Texas, Austin. (UTAUS-SUB00000413). Total award \$2,500.

Horner, Mark W (Co-PI), Ozguven, Eren Erman (Co-PI), Choi, Juyeong (Co-PI), & Smith, Dennis J (PI). (Nov 2021–Nov 2025). *Intra-Regional Mitigation Planning Coordination and Integration of Social Vulnerability and Housing Assessments*. Funded by Florida Department of Economic Opportunity. (MT037). Total award \$348,898.

Horner, Mark W (Co-PI), Mardis, Marcia A. (PI), Ozguven, Eren Erman (Co-PI), Piekalkiewicz, Ellen (Co-PI), & Pickett, Scott M (Co-PI). (Oct 2021–Mar 2025). *SCC-CIVIC-FA Track B: Rural Resiliency Hubs: An Integrated, Community-Centered Approach to Addressing the Resiliency Divide through Rural Public Libraries*. Funded by National Science Foundation. (2133308). Total award \$734,128.

Vanli, A., Ozguven, E., Mathias, J., & Piekalkiewicz, E. (Sep 2021–Aug 2025). *Excellence in Research: Bending the Curve for Vulnerable Populations: A Data-Analytical and Socio-Technical Decision-Making Framework for Sheltering in Hurricane-Pandemics*. Funded by National Science Foundation. (2101091). Total award \$542,167.

- Vanli, A., Ozguven, E. E., & Moses, R. (Apr 2021–Feb 2022). *Diagnostics Tests and Significance Thresholds for Crash Prediction Models: A Phase I Study*. Funded by Florida Department of Transportation. Total award \$175,000.
- Moses, Ren (PI), Ozguven, Eren Erman (Co-PI), & Dulebenets, Maxim A. (Co-PI). (Mar 2021–Oct 2021). *Development of Congestion Factors for Adjusting Traffic Counts During Congested Periods: Phase I – Literature Review and Survey*. Funded by Florida Department of Transportation. (BDV30-977-35). Total award \$49,526.
- Horner, Mark W (Co-PI), Mardis, Marcia A. (PI), Ozguven, Eren Erman (Co-PI), Piekalkiewicz, Ellen (Co-PI), & Pickett, Scott M (Co-PI). (Jan 2021–Jun 2025). *Rural Resiliency Hubs: A Planning Approach to Addressing the Resiliency Divide*. Funded by National Science Foundation. (2041039). Total award \$49,924.
- Jones, Faye R (Co-PI), Mardis, Marcia A. (PI), & Ozguven, Eren Erman (Co-PI). (Aug 2020–Jul 2023). *iSmart: Exploring Smart and Connected Disaster Planning for Rural and Small Libraries*. Funded by Institute of Museum and Libraries. (LG-246371-OLS-20). Total award \$813,927.
- Sobanjo, John O (Co-PI), Moses, Ren (Co-PI), Ozguven, Eren Erman (Co-PI), Dulebenets, Maxim A. (PI), & Pasha, Junayed (Co-PI). (Jun 2020–Dec 2021). *Improving Safety at Highway-Rail Grade Crossings in Florida while Maintaining Continuity of Passenger and Freight Flows: A Multi-Objective Approach*. Funded by Florida Department of Transportation. (BDV30 TWO 977-33). Total award \$215,000.
- Ozguven, Eren Erman (PI), Piekalkiewicz, Ellen (Co-PI), & Tang, Tian (Co-PI). (Apr 2020–Mar 2025). *CoPe RCN: Resilient Rural Infrastructure*. Funded by National Science Foundation. (1940319). Total award \$426,375.
- Moses, Ren (Co-PI), Ozguven, Eren Erman (PI), & Dulebenets, Maxim A. (Co-PI). (Oct 2019–Sep 2021). *Feasibility Analysis of Real-time Intersection Data Collection and Processing Using Drones*. Funded by Florida Department of Transportation. (BDV30 TWO 977-29). Total award \$249,983.
- Huang, Wenrui (PI), & Ozguven, Eren Erman (Co-PI). (Sep 2018–Aug 2021). *ERC: Integrated Hazard and Traffic Modeling for Massive Evacuation in Florida under Uncertainty of Hurricane Track*. Funded by National Science Foundation. (1832068). Total award \$499,682.
- Sobanjo, John O (Co-PI), Moses, Ren (Co-PI), Ozguven, Eren Erman (Co-PI), & Dulebenets, Maxim A. (PI). (Sep 2018–Feb 2020). *Development of the Optimization Model for Improving Safety at Rail Crossings in Florida*. Funded by Florida Department of Transportation. (BDV30 TWO 977-26). Total award \$202,126.

- Horner, Mark W (Co-PI), Duncan Jr, Michael Douglas (Co-PI), Ozguven, Eren Erman (Co-PI), & Smith, Dennis J (PI). (Feb 2018–Oct 2018). *MetroPlan Orlando SunRail TOD Ridership Study*. Funded by MetroPlan Orlando. (None). Total award \$153,161.
- Moses, Ren (PI), & Ozguven, Eren Erman (Co-PI). (Nov 2017–Dec 2021). *Evaluation Of Connected Vehicle Applications On Mahan Corridor, Phase I*. Funded by Florida Department of Transportation. (BDV30 TWO 977-23). Total award \$270,000.
- Boot, Walter R (Co-PI), & Ozguven, Eren Erman (PI). (Sep 2017–Aug 2023). *SCC-RCN:One Bridge at a Time: Bridging the Digital Divide for the Well-Being of Aging Populations through Smart and Connected Communities*. Funded by State University of New York. (79217/1142110/2). Total award \$116,091.
- Moses, Ren (Co-PI), Ozguven, Eren Erman (PI), & Dulebenets, Maxim A. (Co-PI). (Feb 2017–May 2019). *Development of Safety Performance Functions for Restricted Crossing U-Turn (RCUT) Intersections*. Funded by Florida Department of Transportation. (BDV30 TWO 977-19). Total award \$264,886.
- Dulebenets, M., Ozguven, E. E., & Moses, R. (Jan 2017–Jul 2018). *A Comprehensive Assessment of Driver Characteristics for Efficient Emergency Evacuation in Areas with an Aging Population*. Funded by Center for Accessibility and Safety for an Aging Population (ASAP). Total award \$110,110.
- Moses, Ren (Co-PI), Ozguven, Eren Erman (Co-PI), & Dulebenets, Maxim A. (PI). (Dec 2016–Oct 2017). *Establishment of Effective Control Factors to Achieve Federal Enforcement Consistency with the Highway Beautification Act*. Funded by Florida Department of Transportation. (BE288). Total award \$100,000.
- Moses, Ren (PI), Ozguven, Eren Erman (Co-PI), & Dulebenets, Maxim A. (Co-PI). (Dec 2016–Sep 2018). *Evaluation Of Capacity Of Roundabouts*. Funded by Florida Department of Transportation. (BDV30 TWO 985-01). Total award \$150,000.
- Ozguven, Eren Erman (PI), & Arpan, Laura (Co-PI). (Sep 2016–Feb 2019). *UHDNetCity: User-Centered Heterogeneous Data Fusion for Multi-Networked City Mobility*. Funded by National Science Foundation. (1640587). Total award \$233,123.
- Ozguven, E. E., Jung, S., & Sobanjo, J. (Sep 2016–Dec 2017). *Senior Community Resilience: Assessing the Interdependencies between Critical Transportation Infrastructures and Implications on Aging People's Households*. Funded by Center for Accessibility and Safety for an Aging Population (ASAP). Total award \$216,965.
- Abdelrazig, Y., Moses, R., & Ozguven, E. E. (Jan 2016–Aug 2016). *Spatial-Context Intersections Safety Analysis for the Aging Population: An Integrated 3-Dimensional Visualization and Human Factors Simulation Approach*. Funded by Center for Accessibility and Safety for an Aging Population (ASAP). Total award \$135,000.

- Ozguven, E. E., & Horner, M. (Jan 2015–Dec 2015). *Scenario-based Evaluation of Multi-Modal Emergency Transportation Operations towards Better Decision Making in Aging-focused Humanitarian Logistics: Phase I*. Funded by Center for Accessibility and Safety for an Aging Population (ASAP). Total award \$59,321.
- Ozguven, E. E., Vanli, A., Moses, R., Barrett, A., & Sando, T. (Jan 2015–Dec 2016). *Travel Time and Roadway Capacity Reliability for an Aging Population: The Development of a Model Integrating Roadway Traffic with Aging Adults' Driving Behavior*. Funded by Center for Accessibility and Safety for an Aging Population (ASAP). Total award \$329,701.
- Sando, T., Boot, W., Kobelo, D., Ozguven, E. E., & Moses, R. (Jan 2015–Dec 2016). *Micro Analysis of Collisions in Crash Clusters: Creating Crash Patterns and Conducting a Driver Simulation Study*. Funded by Center for Accessibility and Safety for an Aging Population (ASAP). Total award \$225,000.
- Moses, Ren (PI), & Ozguven, Eren Erman (Co-PI). (Nov 2014–Jun 2016). *To Determine the Trip Characteristics of Transit Oriented Development in Florida*. Funded by Florida Department of Transportation. (BDV30 TWO 943-14). Total award \$153,000.
- Ozguven, Eren Erman (PI). (May 2014–Aug 2014). *FYAP: Intermodal Needs Assessment For Transporting Vital Supplies in the Aftermath of A Disaster*. Funded by FSU CRC. (None). Total award \$20,000.
- Ozguven, E. E., Horner, M., Abdelrazig, Y., Sando, T., & Moses, R. (Jan 2014–Feb 2015). *Needs Assessment for Multi-Modal Emergency Transportation Operations with a Focus on an Aging Population*. Funded by Center for Safe and Accessible Transportation for an Aging Population. Total award \$125,400.
- Sando, T., Abdelrazig, Y., Ozguven, E. E., & Moses, R. (Jan 2014–Feb 2015). *Analyzing Crush Clusters near Senior Destination Sites Using a GIS Approach*. Funded by Center for Safe and Accessible Transportation for an Aging Population. Total award \$96,700.
- Abdelrazig, Y., Boot, W., Ozguven, E. E., & Moses, R. (Jan 2014–Feb 2015). *Spatial Context Transportation Safety Analysis for the Aging Population: An Integrated 3-D Dimensional Visualization and Human Factors Simulation Approach*. Funded by Center for Safe and Accessible Transportation for an Aging Population. Total award \$107,000.
- Charness, Neil H (Co-PI), Spainhour, Lisa K (Co-PI), Sobanjo, John O (PI), Ping, Wei-Chou V (Co-PI), Brown, Jeffrey R (Co-PI), Horner, Mark W (Co-PI), Boot, Walter R (Co-PI), Duncan Jr, Michael Douglas (Co-PI), & Ozguven, Eren Erman (Co-PI). (Oct 2013–Sep 2019). *Center for Safe and Accessible Transportation for an Aging Population*. Funded by United States Department of Transportation. (DTRT13-G-UTC42). Total award \$4,209,600.

Ozguven, Eren Erman (PI). (Aug 2013–Jul 2014). *Start Up - Eren Ozguven*. Funded by FSU. (None). Total award \$30,000.

Moses, Ren (PI), & Ozguven, Eren Erman (Co-PI). (May 2013–Jun 2015). *Twenty-Four Hour Peaking Relationship to Level of Service and Other Measures of Effectiveness*. Funded by Florida Department of Transportation. (BDV30 TWO 977-01). Total award \$115,455.

### **Contracts and Grants Pending**

Ozguven, E., Elsner, J., Chanton, J., & Piekalkiewicz, E. (Jan 2021). *SRS RN: Crossing the Compounded Resiliency Divide in the Florida Panhandle*. Submitted to National Science Foundation. Unspecified award amount.

Wang, H., Alamdari, N., Ozguven, E., & Piekalkiewicz, E. (Sep 2020). *Improving Socio-Technological Resilience to Hurricanes by A Data-Driven Multidisciplinary Framework*. Submitted to National Science Foundation. Unspecified award amount.

### **Natural Hazards Center Research Counts Mass Sheltering Special Collection**

Choi, J., Ozguven, E. E., & Abichou, T. (2020). *Planning for Unplanned Resources: Extending Emergency Shelter Capacity Through Cooperation*. Natural Hazards Center.

### **U.S. Department of Transportation University Transportation Center (UTC) Spotlight - July 2015**

Ozguven, E. E., Horner, M., Abdelrazig, Y., Sando, T., & Moses, R. (2015). *Needs Assessment for Multimodal Emergency Transportation Operations With a Focus on an Aging Population*. U.S. Department of Transportation: Office of the Secretary of Transportation.

### **Service**

#### **Florida State University**

#### **FSU Department Service**

Member, Associate Dean for Research and Graduate Studies (2023–present).

Member, Asst Prof in Infrastructure Systems (2023–present).

Coordinator, Transportation Area Committee (2017–present).

Member, Associate Dean for Research and Graduate Studies (2023–2024).

Member, Asst Prof in Infrastructure Systems (2023–2024).

Committee Member, Graduate Committee (2016–2021).

Member, Asst Prof in Sustainable Infrastructure Search Committee (2017–2018).

Committee Member, Undergraduate Committee (2014–2016).

### **FSU Institute or Center Service**

Associate Director and FSU PI, Rural Equitable and Accessible Transportation (REAT) Center (2023–present).

Director, Center for Resilient Infrastructure and Disaster Response (2019–present).

Affiliate, Center for Advanced Power Systems (2019–present).

Affiliate, Pepper Institute on Aging and Public Policy (2018–present).

Member, Center for Accessibility and Safety for an Aging Population (2014–present).

Affiliate, Institute for Successful Longevity (2013–present).

### **The Profession**

#### **Guest Editing for Refereed Journals**

Tang, T., & Ozguven, E. E. (Eds.). (2023, September). Reshaping Infrastructure for a Sustainable and Resilient Future [Special Issue]. *Sustainability*.

Arghandeh, R., Uzunoglu, B., Ozguven, E. E., & Di Arco, S. (Eds.). (2021, July). Data Driven Reliable and Resilient Energy System Against Disasters [Special Issue]. *IEEE Transactions on Industrial Informatics*.

Arghandeh, R., & Ozguven, E. E. (Eds.). (2020, October). Big Data and Smart Cities [Special Issue]. *Energies*.

Kealy, A., Duckham, M., Horner, M., & Ozguven, E. E. (Eds.). (2019, June). Advances in geospatial emergency management [Special Issue]. *Computers, Environment and Urban Systems*.

### **Editorial Board Membership(s)**

*Sustainable Cities and Society* (2024–present).

*Transportation Research Board (TRB)* (2024–present).

*Transportation Research Part D* (2018–present).

### **Guest Reviewer for Refereed Journals**

*Cluster Computing* (2024–present).

*International Journal of Production Research* (2024–present).

*Applied Spatial Analysis and Policy* (2022–present).

*Natural Hazards Review* (2022–present).

*Preventing Chronic Disease* (2022–present).

*Transportation Research Interdisciplinary Perspectives* (2022–present).

*Geo-spatial Information Science* (2021–present).

*Applied Geography* (2020–present).

*International Journal of Environmental Research and Public Health* (2020–present).

*International Journal of Production Economics* (2020–present).

*Journal of Advanced Transportation* (2020–present).

*Journal of Transport Geography* (2020–present).

*Machines* (2020–present).

*Physica A: Statistical Mechanics and its Applications* (2020–present).

*Safety* (2020–present).

*Sustainability* (2020–present).

*Transportation Research Part F* (2020–present).

*Applied Energy* (2019–present).

*Dergipark* (2019–present).

*Journal of Urban Technology* (2019–present).

*Reliability Engineering and System Safety* (2019–present).

*Simulation Modeling Practice and Theory* (2019–present).

*Sustainable Cities and Society* (2019–present).

*IEEE Control Systems Letters* (2018–present).

*International Journal of Transportation Science and Technology* (2018–present).

*Preventing Chronic Disease* (2018–present).

*Accident Analysis and Prevention* (2017–present).

*Euro-Mediterranean Journal for Environmental Integration* (2017–present).

*Production and Operations Management* (2017–present).

*Safety Science* (2017–present).

*IEEE ITS Magazine* (2016–present).

*International Journal of Disaster Risk Reduction* (2016–present).

*Journal of Infrastructure Systems* (2016–present).

*Journal of the Operational Research Society* (2016–present).

*PLOS ONE* (2016–present).

*Surveys in Operations Research and Management Science* (2016–present).

*Sustainability* (2016–present).

*Disasters Journal* (2015–present).

*Recent Patents in Mechanical Engineering* (2015–present).

*Transportation* (2015–present).

*Operational Research: An International Journal* (2014–present).

*Transportation Research Part D* (2014–present).

*Omega, The International Journal of Management Science* (2013–present).

*The IEEE Transactions on ITS* (2013–present).

*European Journal of Operational Research* (2010–present).

*Transport Policy* (2010–present).

*Transportation Research Part A* (2010–present).

*Transportation Research Part E* (2010–present).

*Transportation Research Part C* (2009–present).

*IEEE Conference on Intelligent Transportation Systems* (2007–present).

*Transportation Research Record* (2006–present).

### **Judge for an Exhibition**

*2014 FAMU-FSU College of Engineering Graduate Student Research Symposium*. Tallahassee, FL: FAMU-FSU College of Engineering (2014–2015).

*2013 FAMU-FSU College of Engineering Graduate Student Research Symposium*. Tallahassee, FL: FAMU-FSU College of Engineering (2013–2014).

### **Service to Professional Associations**

Faculty Advisor for the FAMU-FSU College of Engineering Chapter, We launched the ITE Chapter in February 2018, and are currently working on increasing participation with other chapters and Florida State ITE, Institute for Transportation Engineers (2018–present).

## Interviews

- Kelsey Klopfenstein. (2020, September). FSU communication, engineering researchers awarded grant to study natural disaster response. *FSU News*. Retrieved from <https://news.fsu.edu/news/university-news/2020/09/15/fsu-communication-engineering-researchers-awarded-grant-to-study-natural-disaster-response/>
- Bill Wellock. (2020, June). A comparative analysis of transportation-based accessibility to mental health services. *FSU News*. Retrieved from <https://news.fsu.edu/news/health-medicine/2020/06/16/fsu-researchers-find-access-to-mental-health-facilities-in-florida-varies/>
- Bill Wellock. (2020, May). For better emergency management planning, consider stress and frustration. *FSU News*. Retrieved from <https://news.fsu.edu/news/science-technology/2020/05/07/fsu-research-for-better-emergency-management-planning-consider-stress-and-frustration/>
- Trisha Radulovich. (2019, April). FAMU-FSU Engineering researchers analyze mobility data for smart power usage. *FAMU-FSU News*. Retrieved from <https://www.eng.famu.fsu.edu/news/ozguven-load-forecasting>
- Trisha Radulovich. (2019, January). Researchers at FAMU-FSU Engineering use metric specific technology to keep seniors safer on the road. *FSU News*. Retrieved from <https://news.fsu.edu/news/science-technology/2019/01/15/researchers-at-famu-fsu-engineering-use-metric-specific-technology-to-keep-seniors-safer-on-the-road/>
- Kathleen Haughney. (2018, November). A storm plan: New research creates model to help plan for special needs, pet-friendly shelters. *Florida State University News*. Retrieved from <https://news.fsu.edu/news/science-technology/2018/11/19/a-storm-plan-new-research-creates-model-to-help-plan-for-special-needs-pet-friendly-shelters/>
- Tisha Keller. (2018, October). Engineering researchers receive \$500,000 NSF grant to study hurricane evacuation. *Florida State University News*. Retrieved from <https://news.fsu.edu/news/science-technology/2018/10/16/engineering-researchers-receive-500000-nsf-grant-to-study-hurricane-evacuation/>
- Casey Feindt. (2018, October). FAMU-FSU faculty members receive grant from National Science Foundation. *Abc27 WTXL News*. Retrieved from [http://www.wtxl.com/news/fsu-famu-faculty-members-receive-grant-from-national-science-foundation/article\\_9cfd4b10-d31a-11e8-bc67-77ae8f625c1a.html](http://www.wtxl.com/news/fsu-famu-faculty-members-receive-grant-from-national-science-foundation/article_9cfd4b10-d31a-11e8-bc67-77ae8f625c1a.html)
- Casey Chapter. (2018, October). FSU, FAMU receive grant to study hurricane evacuation. *FSUNews.com*. Retrieved from <https://www.fsunews.com/story/news/2018/10/21/fsu-receives-grant-study-hurricane-evacuation/1710946002/>

Robin Sussingham. (2018, September). Elderly Face Challenges Evacuating With Pets. *WFSU Public Media* [Radio Interview]. Retrieved from <http://news.wfsu.org/post/elderly-face-challenges-evacuating-pets>

Daniel Dunaief. (2018, March). SBU's Anil Yazici seeks solutions for the elderly. *TRB Newsmedia* [Article]. Retrieved from <http://tbrnewsmedia.com/sbus-anil-yazici-seeks-solutions-elderly/>

Kara Irby. (2017, October). Evacuating older adults and their furry friends: FSU study finds Florida needs more pet-friendly shelters. *FSU News* [Article]. Retrieved from <http://news.fsu.edu/news/education-society/2017/10/23/evacuating-older-adults-furry-friends-fsu-study-finds-florida-needs-pet-friendly-shelters/>

Vanessa Mills. (2017, October). Pets need an evacuation plan too. *ABC 27 WTXL* [Article]. Retrieved from [http://www.wtxl.com/news/pets-need-an-evacuation-plan-too/article\\_9771d4c4-b9c9-11e7-beb6-a38bb32e6a72.html](http://www.wtxl.com/news/pets-need-an-evacuation-plan-too/article_9771d4c4-b9c9-11e7-beb6-a38bb32e6a72.html)

Brittany Bedi. (2017, August). Heavy traffic, full hotels expected for cities near total solar eclipse. *WCTV Eyewitness News* [Television]. Retrieved from <http://www.wctv.tv/content/news/Heavy-traffic-full-hotels-expected-for-solar-eclipse-438910253.html>

Kathleen Haughney. (2016, October). FSU team tackles urban mobility in smart city era. *FSU News* [Article]. Retrieved from <http://news.fsu.edu/news/science-technology/2016/10/11/fsu-team-tackles-urban-mobility-smart-city-era/>

### **The Community**

Faculty Advisor, Turkish Student Association at Florida State University (2015–present).

Research Sponsor, Young Scholars Program through Florida State University (2023).

Research Sponsor, Young Scholars Program through Florida State University (2022).

Research Sponsor, Young Scholars Program through Florida State University (2019).

Research Sponsor, Young Scholars Program through Florida State University (2018).

Research Sponsor, Young Scholars Program through Florida State University (2017).

Research Sponsor, 2016 Young Scholars Program, Young Scholars Program through Florida State University (2016).

Research Sponsor, 2015 Young Scholars Program, Young Scholars Program through Florida State University (2015).

**IEEE on ITS Conference Special Session Organizer**

Yazici, M. A., & Ozguven, E. E. (2018). *Intelligent Transportation Systems and Disadvantaged Populations: Technology Adoption Challenges and Bridging the Digital Divide*. 21st IEEE International Conference on ITS.