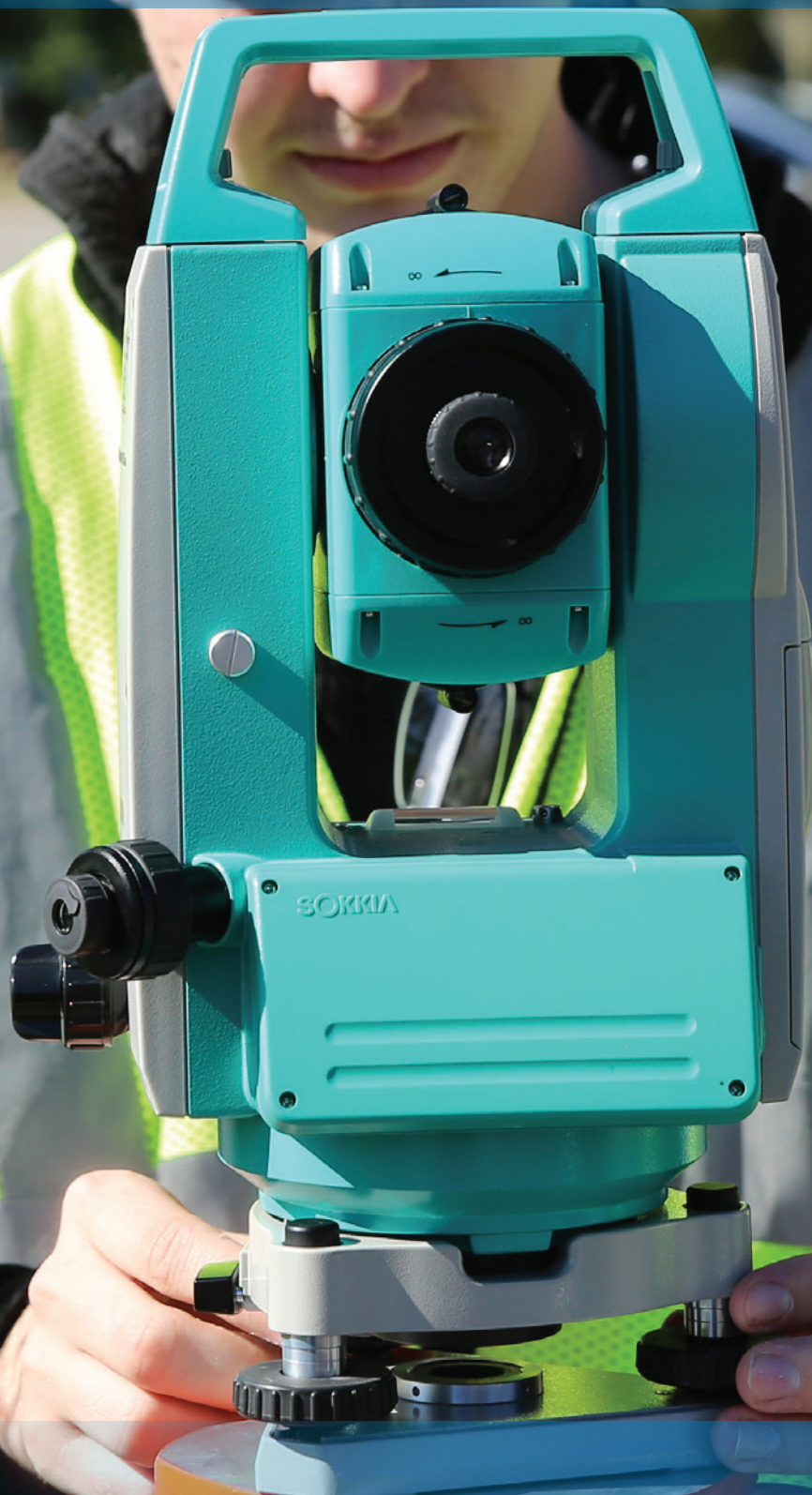




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CHAIR'S MESSAGE

INSIDE

- 3 CHAIR'S MESSAGE
- 4 HEADLINES
- 6 STUDENT NEWS
- 8 FACULTY NEWS
- 9 FUNDING
- 10 PUBLICATIONS

As we highlight another year of success for the Civil and Environmental Engineering Department, I am pleased to announce that I have accepted the position as Department Chair in an official capacity. So, it is with great pleasure I welcome everyone to learn about our amazing department and look forward to seeing growth and success in the coming years.

This past year we said goodbye, congratulations, and wished success on future endeavors to several students. I always feel that the reward of teaching is seeing our students learn and mature and venture out in the workforce ready to make a difference in the world. Yet as a result of these great successes, we have also experienced a minor pitfall, with a slight decrease in enrollment. We currently have just fewer than 200 students in the department at the undergraduate and graduate level. We are confident, however, that with the rapid growth of the University, breakthroughs in Research, and the overgrowing interest in STEM, this number will increase.

Not only has our department experienced student change, but also changes in our faculty as well. We have welcomed Dr. Doustmohammadi and Dr. Ma to our faculty and have said goodbye to Dr. Zhou. As always, the role and mission of the department continues.

As we head toward 2020, I believe that with the collective effort of our students, staff, faculty, board members, alumni, and constituents we will work to make the world a better place to live.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Anderson", written over a light blue rectangular background.

Michael Anderson
Department Chair and Associate Dean
of Graduate Education & Research



UAH's ASCE team at the Southeastern Conference in Knoxville, TN.

THE AMERICAN SOCIETY OF ENGINEERS: UAH CHAPTER COMPETES & PLACES

The American Society of Engineers (ASCE) is an organization that helps young engineers network with professionals and learn how to apply concepts that civil engineers will use in the field. This year, UAH's ASCE team competed in numerous competitions at the Southeastern Conference. The competition had many large colleges competing including: University of Puerto Rico, University of Florida, Kennesaw State University, University of Tennessee, Georgia Southern University, and even a college from China!

UAH's ASCE team mainly participated in the steel bridge and concrete canoe competitions. The steel bridge competition had a sub 20 build time and passed the horizontal load test. UAH's canoe did exceptionally well in the concrete canoe races, placing third and fourth for the product of the canoe and placing fourth overall in the canoe competition. The team proudly placed sixth overall at the conference.

The conference was a great experience for UAH's ASCE. They learned valuable insight from other universities on how they can improve in the upcoming years. The team is excited and looking forward to competing in Orlando at the University of Central Florida next year!

MEET AN INDUSTRIAL ADVISORY BOARD MEMBER



BARBARA R. LEHMAN, P.E.

Ms. Lehman is a Huntsville native having graduated from Grissom High School in 1986. She graduated from Huntingdon College with a Bachelor of Arts Degree in Early Childhood and Elementary Education. After college, Ms. Lehman returned home to begin a career as an educator. After a couple of years teaching, accompanied by her love for science and math, she reenrolled in college and graduated from The University of Alabama in Huntsville, with a Bachelor of Science in Civil Engineering.

For the past 16 years, Ms. Lehman has been a Project Engineer for GEO Solutions where she enjoys helping people solve problems and doesn't mind getting dirty. As Project Engineer, she has had the opportunity to manage multi-million dollar projects in Alabama, Tennessee, Mississippi, Georgia, and Kentucky. Ms. Lehman finally feels that she has found her passion in life with geotechnical engineering.

Since her college days, Ms. Lehman has been an active member in the American Society of Civil Engineers (ASCE) at UAH. She has also had the opportunity to serve as the Alabama Section President and the Governor-At-Large for Region 4 on the National Level. Ms. Lehman has been recognized for her achievements and has had the honor of being awarded ASCE's Young Engineer of the Year and Civil Engineer of the Year by the Huntsville Branch for 2019.

Ms. Lehman has been married to her husband Phillip for 26 years, and they have two boys, Robert and Mitchell.



CONGRATULATIONS TO OUR PH.D. GRADUATES

POOJA PARVATHY PREETHA

Pooja Parvathy Preetha earned her bachelor's degree in Civil Engineering at the College of Engineering, Trivandrum, India; and she completed her masters in Hydraulics and Water Resources Engineering at the Indian Institute of Technology, Madras, India. Before moving to the U.S., Pooja was an Assistant Project Manager at Jones Lang Lasalle, India.

Pooja's dissertation topic was titled "Spatiotemporally Dynamic Water Quality Modeling using Satellite Remote Sensing and GIS." Some of her works include investigating the environmental indicators to human health, flood monitoring, modeling the water quality constituents of sediments and nutrients in river basins and developing integrated surface water-groundwater models.

Pooja believes that the zest of life is to innovate with passion and she hopes to continue learning in an academic setting as well as research oriented circles.

ZHENGLAI SHEN

Zhenglai Shen is a Ph.D. candidate in the CEE Department. His dissertation focuses on life-cycle considerations in risk-informed decisions for energy-efficient building design under various hazard exposures and climate conditions. During the last five years, he has worked on several different projects which were supported by the Alabama Department of Transportation (ALDOT), National Science Foundation (NSF), and the Department of Energy (DOE).

His research interests include:

- ▶ multi-discipline fused building design and retrofitting
- ▶ physical-cyber security of building under natural and human-made hazards include cyber-attack
- ▶ development and modeling of high-performance construction material for structural and energy synergic building applications
- ▶ structural health monitoring through wireless sensor networks and data pattern recognition by fusing data from various sources





XIANKUN CHEN

Chen is a Ph.D. student in the Department of Civil and Environmental Engineering. The reason he chose this program is that he likes to work in an interdisciplinary program which is challenging and intriguing, and he can contribute to society by protecting the environment. His research mainly focuses on the advanced oxidation process in water and wastewater treatment on contaminants of emerging concern, including improving the efficiency in catalytic ozonation and minimizing the formation of disinfection byproducts. Outside of school, he loves to play all kinds of sports, especially volleyball and tennis.



IZUCHUKWU ALBERT UGWU

Ugwu joins UAH from Nigeria. He is currently an MSE student in the Department of Civil and Environmental Engineering. He is working on the Post-Disaster Recovery Planning for Interdependent Infrastructure Systems at the Resilient Civil Infrastructure (RCIS) Lab where he works as a graduate research assistant under Dr. Abdullahi Salman. Prior to joining UAH, he worked as a structural engineer at Arup, specializing in structural Integrity Assessment and Impact Assessment. Working on his current interest gives him the opportunity to broaden his knowledge and has opened the door to new concepts in hazard mitigation on a network scale. He is also learning new concepts in Industrial and Systems Engineering and their application in Civil Engineering. He is a member of the Structural Extreme Events and Reconnaissance (StEER) Network, and the Nearshore Extreme Events Reconnaissance (NEER) Association. With these groups, he has access to a broad network of researchers and investigators, and he is able to gather experience in virtual and field assessment of areas affected by natural disasters. Outside work and school, Izuchukwu likes to travel, read books, and play soccer.



JUSTIN WEEMS

Weems is a senior whose time here at UAH has been one of learning, making new friends, and memories. When he first transferred here he wasn't sure that Civil Engineering was what he would be passionate about. The staff and students here changed his mind instantly. The quality of the professors here and the friendships he made confirmed his decision. Later on he found more friends who enjoy his passion for fishing and joined the UAH Fishing Team. As the current Treasurer he is in charge of all the finances of the team.



THOMAS WISINSKI

Wisinski is a senior graduating with a Bachelor's degree in Civil Engineering. Throughout his time at UAH, he has been heavily involved in UAH's ASCE Student Chapter serving as the Treasurer, President, and Concrete Canoe Co-Chair. He enjoys hiking, kayaking, attending concerts, DJing parties, listening to his record collection, and studying for Dr. Al-Hamdan's exams. He has interned for Barge Design Solutions in the area of Site Development for the past two years and is looking forward to his career as a Civil Engineer. He also plans on completing his Master in Civil Engineering with a focus in Water Resources.



WENWEN YANG

Yang is Ph.D. graduate student in Department of Civil and Environmental Engineering. She earned her bachelor's in Macromolecule and Material Engineering from East China Jiaotong University (Nanchang, China) and a Master's degree in Environmental Engineering from the University of Alabama in Huntsville. She is currently working as a graduate research assistant/teaching assistant with Dr. Tingting Wu. Her research focuses on advancing heterogeneous catalytic ozonation for water treatment and reuse. In between all her research, she still finds time to get lost in a wonderful book and music.

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DR. MEHRNAZ DOUSTMOHAMMADI



Dr. Doustmohammadi is a Lecturer and Research Scientist in the Department of Civil and Environmental Engineering at The University of Alabama in Huntsville. She graduated with her bachelor's degree from Khajeh Nasir Toosi University of Technology in Tehran, Iran in 2013 and received her Master's degree in Industrial Engineering and her Ph.D. in Civil Engineering from UAH in 2015 and 2018, respectively.

Dr. Doustmohammadi's area of research is in traffic safety and modeling. In her capacities as a Research Scientist, she works closely with the Alabama Department of Transportation and leads a program which provides instruction and training for public transportation across the state of Alabama utilizing a Real-time Instruction for Driver Education (RIDE) simulator. She performs crash analysis using advanced statistical techniques to look for factors contributing to crashes in the state of Alabama.

Dr. Doustmohammadi works with the Resilient Civil Infrastructure Systems Lab (RCIS) on studying the recovery to infrastructure damaged by natural and manmade hazards.

DR. RUI MA



Dr. Ma is an Assistant Professor in the Department of Civil and Environmental Engineering at The University of Alabama in Huntsville. He received his Ph.D. degree in Civil Engineering from Rensselaer Polytechnic Institute in 2013, and his B.Eng. degree in Automation from Tsinghua University in 2009. Prior to joining UAH, he was a Lecturer and Postdoc Scholar in the Department of Civil and Environmental Engineering at University of California, Davis, where he was teaching undergraduate and graduate courses, collaborating with visiting scholars, supervising undergraduate and graduate students, and conducting research on dynamic transportation network modeling, new mobilities, sustainable transportation systems, and urban traffic data analytics.

Dr. Ma's research interests include understanding and analyzing dynamic commuting traffic patterns with new mobility services in both analytical and numerical forms, designing accessible and intelligent control strategies to enhance the performance in efficiency and toward an environment and public health-friendly transportation system, and leveraging real-time infrastructure data and crowd-sourcing data for forecasting and managing traffic systems.

Standing at the crossroad where the traditional planning, control, and optimization theories meet the revolutionary technologies, services, and social trends, Dr. Ma's long-term research goal is to develop an innovative modeling framework for new mobility services. By analyzing how dynamic traffic patterns would interdependently impact the planning and operations of intelligent infrastructure, and optimizing urban mobility and sustainability by intelligent and nonconventional control strategies, his research would ultimately contribute to both the advancement of transportation science and the contemporary transportation industries.

Dr. Ma is an active member of Transportation Research Board (TRB) and Institute for Operations Research and the Management Sciences (INFORMS).

RESEARCH GRANTS & CONTRACTS

1. "Alabama Public Transportation Agency Safety Plan," Sponsored by the Alabama Department of Transportation, January 22, 2019 – September 1, 2020. (\$275,000).
2. "Alabama Transit Management System," Sponsored by the Alabama Department of Transportation, October 1, 2018 – September 30, 2020. (\$2,250,000).
3. "Performance Reviews for Section 5310 and 5311 Agencies," Sponsored by the Alabama Department of Transportation, September 1, 2015 – September 30, 2020, (\$243,141).
4. "Modeling Support for ALDOT and Alabama MPOs," Sponsored by the Alabama Department of Transportation. October 1, 2019 – September 30, 2020. (\$58,000).
5. "Implementing usRAP in Alabama: Coving the State – Phase 4," Sponsored by the Alabama Department of Transportation, October 1, 2018 – September 30, 2020, (\$373,301).
6. "I-10 Mobile River Bridge: A Macroscopic Study of No-Build Implications," Sponsored by the University of Alabama. August 6, 2019 – September 13, 2019. (\$10,705).
7. "Developing a Dynamic SPARROW Water Quality Decision Support System Using NASA Remotely-Sensed Products," Sponsored by National Aeronautics and Space Administration (NASA), March 2017 – March 2020, (\$399,975).
8. ACHE/GRSP: Low-cost Multifunctional Hybrid Materials for Water Quality Control (PI: Tingting Wu; Student: Chi Thanh Vu), Alabama EPSCoR, ACHE, State of AL, Period: 08/2019~08/2020, (\$25,000).
9. ACHE/GRSP: Nanostructured Earth-abundant Metal Oxides as Novel Electrodes for Water Purification (PI: Tingting Wu; Student: Amir Ahmadi), Alabama EPSCoR, ACHE, State of AL, Period: 08/2019~08/2020, (\$18,750).
10. NSF-REU Supplemental Funding: Plasmon-enhanced Catalytic Ozonation for Water Treatment and Reuse (PI: Tingting Wu), NSF, Period: 06/2019~08/2020, (\$12,000).
11. Plasmon-enhanced Catalytic Ozonation for Water Treatment and Reuse (PI: Tingting Wu, Co-PI: Yu Lei), National Science Foundation (NSF), Period: 09/2016~08/2020, (\$329,711).
12. "FY20-22 Driver Development Training Program," Alabama Department of Transportation, October 2019 – September 2020, (\$553,613).
13. "Development of Alabama Specific Safety Plan Performance Functions for Intersections," University of Alabama, November 2018 – May 2020, (\$40,000).
14. "Wet Pavement Analysis Phase II, to Develop and Refine Methods to Identify and Analyze Sites with Wet Pavement Crashes," Alabama Department of Transportation October 2018 – September 2020, (\$298,967).

1. L. Yang, W. Guan, R. Ma, X. Li (2019). "Comparison Among Driving State Prediction Models for Car-Following Condition Based on EEG and Driving Features," *Accident Analysis & Prevention*. Vol. 133, December 2019, 105296.
2. Preetha, P.P., Al-Hamdan, A. Z., and Anderson, M. (2019). "Assessment of Climate Variability and Short Term Land Use Land Cover Change Effects on Water Quality of Cahaba River Basin Using SWA," *International Journal of Hydrology Science and Technology*. In Press.
3. Preetha, P.P., and Al-Hamdan, A. Z., (2019). "Multi-level Pedotransfer Modification functions of the USLE-K Factor for Annual Soil Erodibility Estimation of Mixed Landscapes," *Modeling Earth Systems and Environment*. Vol.5, No.3, pp. 767-779.
4. Hasan, M., Replogle, J., Kassu, A., and Al-Hamdan, A. Z. (2019). "A portable orifice meter for pump flow measurement," *Journal of Agricultural Science and Engineering*. Vol.5, No.2, pp. 49-55.
5. Estes, M., Al-Hamdan, A.Z., Ellenburg, W.L., Cruise, J., Smith, R. A., Hoos, A., Al-Hamdan, M.Z., and Crosson, W.L. (2018) "Deriving Disturbance Indices and Loading Factors Using Remote Sensing Data and Crop Models to Develop Derived Variables for SPARROW Water Quality Models in the Southeast USA," *American Geophysical Union (AGU), Fall Meeting*. Washington D.C., December 2018.
6. Al-Hamdan, M.Z., Smith, R. A., Hoos, A., Schwarz, G.E., Alexander, R. B., Crosson, W.L., Srikishen, J., Estes, M., Cruise, J., Al-Hamdan, A.Z., Ellenburg, W.L., Flores A., Sanford, W.E., Zell, W., Reitz, M., Miller, M.P., Journey, C.A., Befus, K.M., Swann, R., Herder, T., Sherwood, E., Leverone, J., Shelton, M., Smith, E.T., Anastasiou, C.J., Seachrist, J., Hughes, A., and Graves, D. (2018). "Infusing NASA Remotely-Sensed Data into a Dynamic SPARROW Water Quality Modeling and Decision Support System for the Southeastern United States," *American Geophysical Union (AGU), Fall Meeting*. Washington D.C., December 2018.
7. Shojaeshafiei, M., Etzkorn, L., and Anderson, M. "Cybersecurity Framework Requirements to Quantify Vulnerabilities Based on GQM," *National Cyber Summit*. Springer, Cham, 2019.
8. Doustmohammadi, M., Anderson, M., Doustmohammadi, E. "Regression Analysis to Create New Truck Trip Generation Equations for Medium Sized Communities," *Current Urban Studies*. Vol. 7, No. 3, 2019. pp. 480-491.
9. Abburi, D., Doustmohammadi, M., Anderson, M.D. "Analysis of Emergency Response to Crashes Based on Demographic Factors," *International Journal of Traffic and Transportation Engineering*. Vol. 8, No. 2, 2019. pp. 25-28.
10. Doustmohammadi, M., Anderson, M.D. and Gholston, S. "Wet Pavement Crash Analysis for Alabama Roadways," *International Journal of Statistics and Applications*. Vol. 9, No. 1, 2019. pp. 21-28.
11. Doustmohammadi, M., Anderson, M.D. "A Bayesian Regression Model for Estimating Average Daily Traffic Volumes for Low Volume Roadways," *International Journal of Statistics and Probability*. Vol 8., No. 1, 2019. pp. 143-149.
12. Khan, T., Anderson, M.D., Kassu, A. "Promoting Transportation Sustainability by Utilizing Available Roadway Capacity," *Current Urban Studies*. Vol. 6, No. 4, 2018. pp. 517-531.
13. Khan, T., Anderson, M.D. "Measuring Urban Sprawl Indices at Traffic Analysis Zone (TAZ) Level," *Current Urban Studies*. Vol. 6, No. 4, 2018. pp. 499-516.
14. Ahmadi, A. and Wu, T.* "Electrocatalytic Reduction of Nitrobenzene using TiO₂ Nanotube Electrodes with Different Morphologies: Kinetics, Mechanism, and Degradation Pathways," *Chemical Engineering Journal*. 1241-1252, 2019. pp. 374.
15. Vu, C. T. and Wu, T.* "Engineered Multifunctional Sand for Enhanced Removal of Stormwater Runoff Contaminants in Fixed-bed Column Systems," *Chemosphere*. 852-861, 2019. pp. 224.
16. Yang, W. and Wu, T.* "Investigation of Matrix Effects in Laboratory Studies of Catalytic Ozonation Processes," *Industrial & Engineering Chemistry Research*. 3468-3477, 2019. pp. 58.
17. Yang, W., Lu, Z., Vogler, B., Wu, T.*, Lei, Y. "Enhancement of Copper Catalyst Stability for Catalytic Ozonation in Water Treatment Using ALD Overcoating," *ACS Applied Materials & Interfaces*. 43323-43326, 2018. pp. 10.
18. Ahmadi, A. and Wu, T. "Removal of Meropenem from Environmental Matrices by Electrochemical Oxidation," *The 258th ACS National Meeting*. San Diego, CA, August 25 – 29, 2019
19. Yang, W., Chen, X., Bunian, M., Lei, Y., Wu, T. "Photo-Assisted Catalytic Ozonation for the Treatment of Ozone-Resistant Water Pollutants", *The 258th ACS National Meeting*. San Diego, CA, August 25 ~ 29, 2019

20. Yang, W., Lu, Z., Vogler, B., Wu, T., Lei, Y. "Enhancement of Copper Catalyst Stability for Catalytic Ozonation in Water Treatment Using ALD Overcoating," NAM 26: North American Catalysis Society Meeting. Chicago, IL, June 23 – 28, 2019.
21. Ahmadi, A. and Wu, T. "Cathodic Reduction of Nitrobenzene using TiO₂ Nanotube Electrodes with Different Morphologies," The 257th ACS National Meeting. Orlando, FL, March 31 – April 04, 2019.
22. Braik, A., Salman, A.M., & Li, Y. "Reliability-Based Assessment and Cost Analysis of Power Distribution Systems at Risk of Tornado Hazard," ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering. In press, 2019.
23. Asadi, E., Salman, A.M., & Li, Y. "Multi-Criteria Decision-Making for Seismic Resilience and Sustainability Assessment of Diagrid Buildings," Engineering Structures. In press, 2019.
24. Mazumder, R.K., Salman, A.M., Li, Y., & Yu, X. "Seismic Functionality and Resilience Analysis of Water Distribution Systems," ASCE Journal of Pipeline System Engineering & Practice. In press, 2019.
25. Merschman, E.*, Doustmohammadi, M., Salman, A.M., Anderson, M. "A Post-Disaster Decision Framework for Selection of Bridge Rehabilitation for Disrupted Transportation Networks," Transportation Resilience 2019: An International Conference on Natural Hazards and Extreme Weather Events. Washington, DC, November 13-15, 2019.
26. Salman, A. M., Li, Y., & Bastidas-Arteaga, E. "System-level Maintenance Optimization for Power Distribution Systems Subjected to Hurricanes," 13th International Conference on Applications of Statistics and Probability in Civil Engineering. Seoul, South Korea, May 2019, pp.26-30, hdl.handle.net/10371/153432.
27. Mazumder, R. K., Salman, A. M. & Li, Y. "Reliability Assessment of Corroded Water Distribution Infrastructure," UESI Pipelines Conference. Nashville, Tennessee, July 21-24, 2019.
28. Mazumder, R.K., Salman, A.M., Li, Y., & Yu, X. "A Decision-making Framework for Water Distribution Systems using Fuzzy Logic and Centrality Analysis," 13th International Conference on Applications of Statistics and Probability in Civil Engineering. Seoul, South Korea, May 26-30, 2019, hdl.handle.net/10371/153463
29. Mortazavi, M., Heo, Y., & Salman, A.M. "Vapor Cloud Explosion Risk Sensitivity to the Ignition Model for Offshore Process Systems," 13th International Conference on Applications of Statistics and Probability in Civil Engineering. Seoul, South Korea, May 26-30, 2019, hdl.handle.net/10371/153518.
30. Marshall, Justin; Smith, Daniel; Lyda, Andrew; Roueche, David; Davis, Brett; DJIMA, Wilfrid; Heo, YeongAe; Kijewski-Correa, Tracy; Moravej, Mohammadtaghi; Rittelmeyer, Brandon; Salman, Abdullahi; Prevatt, David; Robertson, Ian; Mosalam, Khalid. "StEER - Hurricane Dorian: Field Assessment Structural Team (FAST-1) Early Access Reconnaissance Report (EARR)," DesignSafe-CI. 2019, doi.org/10.17603/ds2-4616-1e25.
31. Roueche, David; Cleary, John; Barnes, Robert; Davis, Brett; Marshall, Justin; Rittelmeyer, Brandon; Smallegan, Stephanie; Guo, Yanlin; Hodges, Courtney; Kijewski-Correa, Tracy; Salman, Abdullahi; Turner, Kelly; Merschman, Eric; Mulchandani, Harish; Prevatt, David; Robertson, Ian; Mosalam, Khalid. "StEER - 3 March 2019 Tornadoes in the Southeastern U.S.: Field Assessment Structural Team (FAST) Early Access Reconnaissance Report (EARR)," DesignSafe-CI. 2019, doi.org/10.17603/ds2-qav0-t570.
32. Doustmohammadi, M. "Urban Freight Crash Analysis Using Ordinal Logit and Ordinal Probit Regression in the State of Alabama," International Journal for Traffic & Transport Engineering. Vol.9, No.1, 2019

PUBLICATIONS

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