

Abdullahi M. Salman, Ph.D., P.E.

Associate Professor, Department of Civil & Environmental Engineering

The University of Alabama in Huntsville

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Website: <https://sites.google.com/uah.edu/rcislab/home?authuser=1>

Google Scholar: <https://scholar.google.com/citations?user=lmL1ifMAAAJ&hl=en>

EDUCATION

Michigan Technological University Ph.D., Civil Engineering	Sep. 2014 – Aug. 2016
Michigan Technological University M.S., Civil Engineering (Structures)	Aug. 2012 – May 2014
Curtin University, Malaysia Campus B.Eng., Civil and Construction First Class Honors	Mar. 2007 – Jan. 2011

RESEARCH INTERESTS

- Resilient and sustainable civil infrastructure systems
- Community resilience
- Probabilistic natural hazard modeling
- Structural reliability analysis
- Risk-based & multi-criteria decision making

ACADEMIC EMPLOYMENT

Associate Professor Department of Civil & Env. Engineering, The University of Alabama in Huntsville Huntsville, Alabama, USA	Aug. 2024 – present
Assistant Professor Department of Civil & Env. Engineering, The University of Alabama in Huntsville Huntsville, Alabama, USA	Aug. 2018 – Aug. 2024
Research Associate Department of Civil Engineering, Case Western Reserve University Cleveland, Ohio, USA	Sep. 2016 – Aug. 2018
Teaching and Research Assistant Department of Civil & Env. Engineering, Michigan Technological University Houghton, Michigan, USA	Sep. 2014 – Aug. 2016

AWARDS AND FELLOWSHIPS

- UAH COE Outstanding Junior Faculty Award, 2023
- NSF CAREER Award, 2022
- Gulf Research Program Early-Career Research Fellowship, 2022
- Michigan Tech Doctoral Finishing Fellowship, 2016
- Outstanding Graduate Student Teaching Award, Michigan Tech, 2016
- Shin Yang Best Graduate for Civil and Construction Award, Curtin University, 2011
- Samling Best Student Award, Curtin University, 2011

RESEARCH PROJECTS, GRANTS, AND CONTRACTS

1. **Title:** CAREER: Integrating Resilience and Social Vulnerability in the Management of Civil Infrastructure Systems
Funding agency: National Science Foundation (NSF)
Role: Principal Investigator
Amount: \$505,313
Duration: 9/01/2022 – 8/31/2027
2. **Title:** UAH-CCC GSP - Preparing the Next Generation to Address Critical Challenges of the Gulf of Mexico Region
Funding agency: Gulf Research Program, National Academy of Sciences
Role: Co-Director (PI – Azita Amiri, Nursing)
Amount: \$599,998
Duration: 9/1/2024 – 8/31/2029
3. **Title:** Impact of Coastal Hazards on the Ecosystems of the Gulf Coast Considering Climate Change
Funding agency: Gulf Research Program, National Academy of Sciences
Role: Principal Investigator
Amount: \$76,000
Duration: 9/01/2022 – 2/28/2025
4. **Title:** Support Testing of Planetary 3D Printed Concrete Structures for Subscale Landing Pad Fabrication
Funding agency: National Aeronautics and Space Administration (NASA), Marshall Space Flight Center
Role: Co-Principal Investigator (PI – Dr. Judith Schneider)
Amount: Total: \$99,986. My share: \$48,477
Duration: 11/02/2020 – 11/01/2022
5. **Title:** Data-driven Resilience Assessment of Road Networks Subjected to Natural Hazards
Program: UAH New Faculty Research Program
Funding agency: UAH Office of the Vice President for Research and Economic Development (OVPRED)
Role: Principal Investigator
Amount: \$10,000
Duration: 12/14/2018 – 7/31/2020

PUBLICATIONS AND PRESENTATIONS

Journal Publications (Underline indicates students supervised)

1. Ibrar, M.A., Usama, M., & Salman, A.M. (2025). A machine learning model for detecting and quantifying tropical cyclone related disturbance and recovery in estuaries. Scientific Reports. In press. DOI: 10.1038/s41598-025-89196-6.
2. Merschman, E., Doustmohammadi, M., Salman, A.M., & Anderson, M. (2025). Post-disaster Decision-Making Framework for Roadway Networks Considering Social Vulnerability. *Travel Behavior and Society*, 38, 100910.
3. Salarieh, B., & Salman, A.M. (2024). Regional Climate Change Adaptation Planning: A Case Study on Residential Buildings Vulnerable to Hurricane Winds in Coastal US. *Frontiers in Built Environment – Computational Methods in Structural Engineering*, 10, 1273311.
4. Li, Y., Ellingwood, B. R., Vickery, P., Banik, S., & Salman, A. M. (2024). Reliability Bases for Tornado Load Criteria for ASCE Standard 7-22. *Journal of Structural Engineering*, 150(11), 04024163.

5. Salarieh, B., Ugwu, I.A. & Salman, A.M. (2023). Impact of changes in sea surface temperature due to climate change on hurricane wind and storm surge hazards across US Atlantic and Gulf coast regions. *SN Applied Sciences*. **5**, 205.
6. Ugwu, I.A., Salarieh, B., Salman, A.M., Petnga, L., & Williams, M. (2022). Post-Disaster Recovery Planning for Interdependent Infrastructure Systems Prioritizing the Functionality of Healthcare Facilities. *ASCE Journal of Infrastructure Systems*, **28**(4), 04022038.
7. Wang, X., Mazumder, R.K., Salarieh, B., Salman, A.M., Shafieezadeh, A., & Li, Y. (2022). Machine Learning for Risk and Resilience Assessment in Structural Engineering: Progress and Future Trends. *ASCE Journal of Structural Engineering*, **148**(8), 03122003.
8. Orcesi, A., O'Connor, A., Diamantidis, D., Wu, T., Akiyama, M., Alhamid, A., Sykora, M., Schmidt, F., Pregnotato, M., Li, Y., Salarieh, B., Salman, A.M., Bastidas-Arteaga, E., Markogiannaki, O., & Schoefs, F. (2022). Investigating the effects of climate change on structural actions. *Structural Engineering International*. **32**:4, 563-576.
9. Orcesi, A., O'Connor, A., Bastidas-Arteaga, E., Stewart, M.G., Imam, B., Ryan, P.C., Kreislova, K., Schoefs, F., Markogiannaki, O., Wu, T., Li, Y., Salman., & Hawchar, L. (2022). Investigating the Effects of Climate Change on Material Properties and Structural Performance. *Structural Engineering International*. **32**:4, 577-588.
10. Asadi, E., Salman, A. M., Li, Y., & Yu, X. (2021). Localized health monitoring for seismic resilience quantification and safety evaluation of smart structures. *Structural Safety*, **93**, 102127.
11. Mazumder, R. K., Rana, S., & Salman, A. M. (2021). First level seismic risk assessment of old unreinforced masonry (URM) using fuzzy synthetic evaluation. *Journal of Building Engineering*, **44**, 103162.
12. Mazumder, R.K., Salman, A.M., Li, Y., & Yu, X. (2021). Asset Management Decision Support Model for Water Distribution Systems: Impact of Water Pipe Failure on Road and Water Networks. *ASCE J. of Water Resources Planning and Management*, **147**(5), 04021022.
13. Merschman, E., Salman, A. M., Bastidas-Arteaga, E., & Li, Y. (2020). Assessment of the Effectiveness of Wood Pole Repair Using FRP Considering the Impact of Climate Change on Decay and Hurricane Risk. *Advances in Climate Change Research*, **11**(4), 332-348.
14. Salman, A. M., Salarieh, B., Bastidas-Arteaga, E., & Li, Y. (2020). Optimization of Condition-Based Maintenance of Wood Utility Pole Network Subjected to Hurricane Hazard and Climate Change. *Frontiers in Built Environment – Computational Methods in Structural Engineering*, **6**(73). doi:10.3389/fbuil.2020.00073
15. Merschman, E., Doustmohammadi, M., Salman, A.M., Anderson, M. (2020). Post-Disaster Decision Framework for Bridge Repair Prioritization to Improve Road Network Resilience. *Transportation Research Record: Journal of the Transportation Research Board*, **2674**(3), 81-92.
16. Mazumder, R.K., Salman, A.M., & Li, Y. (2020). Failure Risk Analysis of Pipelines using Data-Driven Machine Learning Algorithms. *Structural Safety*, **89**, 102047.
17. Mazumder, R.K., Salman, A.M., Li, Y. (2020). Post-Disaster Sequential Recovery Planning for Water Distribution Systems Using Topological and Hydraulic Metrics. *Structure and Infrastructure Engineering*. <https://doi.org/10.1080/15732479.2020.1864415>
18. Asadi E., Shen, Z., Zhou, H., Salman, A.M., & Li, Yu. (2020). Risk-informed Multi-criteria Decision Framework for Resilience, Sustainability, and Energy Analysis of Reinforced Concrete Buildings. *Journal of Building Performance Simulation*. **13**(6), 804-823.
19. Mazumder, R.K., Fan, X., Salman, A.M., Li, Y., & Yu, X. (2020). Framework for Seismic Damage and Renewal Cost Analysis of Buried Water Pipelines. *ASCE Journal of Pipeline Systems – Engineering and Practice*, **11**(4), 04020038.
20. Braik, A., Salman, A.M., & Li, Y. (2020). 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*. **6**(2), 04020014.

21. Haque, D. M. E., Mimi, A., Mazumder, R. K., & Salman, A. M. (2020). Evaluation of natural hazard risk for coastal districts of Bangladesh using the INFORM approach. *International Journal of Disaster Risk Reduction*, 48, 101569.
22. Mazumder, R.K., Salman, A.M., Li, Y., & Yu, X. (2020). Seismic Functionality and Resilience Analysis of Water Distribution Systems. *ASCE Journal of Pipeline System Engineering & Practice*, 11(1), 04019045.
23. Asadi, E., Salman, A.M., & Li, Y. (2019). Multi-Criteria Decision-Making for Seismic Resilience and Sustainability Assessment of Diagrid Buildings. *Engineering Structures*. 191: 229-246.
24. Mazumder, R.K. & Salman, A.M. (2019). Seismic Damage Assessment Using RADIUS and GIS: A Case Study of Sylhet City, Bangladesh. *International Journal of Disaster Risk Reduction*, 34, 243-254.
25. Braik, A., Salman, A.M., & Li, Y. (2019). Risk-Based Reliability and Cost Analysis of Utility Poles Subjected to Tornado Hazard. *ASCE Journal of Aerospace Engineering*. 32(4), 04019040.
26. Mazumder, R.K., Salman, A.M., Li, Y., & Yu, X. (2019). Reliability Analysis of Water Distribution Systems using Physical Probabilistic Pipe Failure Method. *ASCE J. of Water Resources Planning and Management*. 145(2): 04018097.
27. Salman, A.M. & Li, Y. (2018). A Probabilistic Framework for Multi-Hazard Risk Mitigation for Electric Power Systems Subjected to Seismic and Hurricane Hazards. *Structure & Infrastructure Engineering*. 14(11): 1499-1519.
28. Salman, A.M. & Li, Y. (2018). Flood Risk Assessment, Future Trend Modeling, and Risk Communication: A Review of Ongoing Research. *Natural Hazards Review, ASCE*. 19(3): 04018011.
29. Mazumder, R.K., Salman, A.M., Li, Y., & Yu, X. (2018). Performance Evaluation of Water Distribution Systems and Asset Management. *ASCE Journal of Infrastructure Systems*, 24(3): 03118001.
30. Salman, A. M. & Li, Y. (2018). A Framework to Investigate the Effectiveness of Interconnection of Power Distribution Systems Subjected to Hurricanes. *Structure & Infrastructure Engineering*. 14(2): 203-217.
31. Salman, A. M., Li, Y., & Bastidas-Arteaga, E. (2017). Maintenance Optimization for Power Distribution Systems Subjected to Hurricane Hazard, Timber Decay and Climate Change. *Reliability Engineering & System Safety*. 168: 136-149.
32. Salman, A.M. & Li, Y (2017). Multihazard Risk Assessment of Electric Power Systems. *ASCE Journal of Structural Engineering*, 143(3), 04016198.
33. Salman, A. M. & Li, Y. (2017). Assessing Climate Change Impact on System Reliability of Power Distribution Systems Subjected to Hurricanes. *ASCE Journal of Infrastructure Systems*, 23(1), 04016024.
34. Salman, A. M. & Li, Y. (2016). Age-dependent Fragility and Life-cycle Cost Analysis of Wood and Steel Power Distribution Poles Subjected to Hurricanes. *Structure & Infrastructure Engineering*, 12(8), 890-903.
35. Salman, A. M., Li, Y., & Stewart, M. G. (2015). Evaluating System Reliability and Targeted Hardening Strategies of Power Distribution Systems Subjected to Hurricanes. *Reliability Engineering & System Safety*. 144: 319-333.
36. Jayakumar, M. & Salman, A. M. (2011). Experimental Study on Sustainable Concrete with the Mixture of Low Calcium Fly Ash and Lime as a Partial Replacement of Cement. *Advanced Materials Research*, (250-253): 307-312.

Book Chapters

1. Li, Y., Salman, A. M., Braik, A., Bjarnadóttir, S., & Salarieh, B. (2022). Risk-Based Management of Electric Power Distribution Systems Subjected to Hurricane and Tornado Hazards. In *Engineering for Extremes* (pp. 143-166). Springer, Cham. DOI: [10.1007/978-3-030-85018-0_7](https://doi.org/10.1007/978-3-030-85018-0_7)

Peer-Reviewed Conference Proceedings

1. Levitan, M.L., Ellingwood, B.R., Vickery, P., Li, Y., McAllister, T.P., Harris, J.B., Twisdale, L., Salman, A.M., & Braiki, A. (2022). Tornado Load Criteria for ASCE Standard 7-22: A probabilistic approach. ICOSAR 2021-2022, 13th International Conference on Structural Safety & Reliability, 13-17 September 2022, Tongji University, Shanghai, China.
2. Orcesi, A., O'Connor, A., Wu, T., Diamantidis, D., Sýkora, M., Imam, B., Schmidt, F., Li, Y., Bastidas-Arteaga, E., Pregnolato, M., Kreislova, K., Schoefs, F., Stewart, M., Salman, A. (2021). Investigating the effects of climate change on structural resistance and actions. *IABSE Congress: Structural Engineering for Future Societal Needs*. Ghent, Belgium, September 22-24, 2021. <http://dx.doi.org/10.2749/ghent.2021.0974>
3. Mazumder, R. K., Salman, A. M., & Li, Y. (2021). Reliability Assessment of Oil and Gas Pipeline Systems at Burst Limit State under Active Corrosion. *International Probabilistic Workshop*. Minho, Portugal, May 12-14, 2021. <https://link.springer.com/content/pdf/10.1007%2F978-3-030-73616-3.pdf>
4. Mazumder, R. K., Salman, A. M., Li, Y. (2020). Age-dependent Fragility Analysis of Underground Oil and Gas Pipelines. The 14th International Conference on Computational Structures Technology. Mallorca, Spain, September 8-10, 2020.
5. Asadi E., Shen, Z., Zhou, H., Salman, A.M., & Li, Yu. (2020). Life-Cycle Resilience and Sustainability Assessment of Reinforced Concrete Buildings with Thermal-Mass Shear Walls. *The Seventh International Symposium on Life-Cycle Civil Engineering*. Shanghai, China - October 27-30, 2020.
6. Mazumder, R. K., Salman, A. M. & Li, Y. (2019). Reliability Assessment of Corroded Water Distribution Infrastructure. *UESI Pipelines Conference*. Nashville, Tennessee, July 21-24, 2019.
7. Salman, A. M., Li, Y., & Bastidas-Arteaga, E. (2019). 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, 26-30 May 2019. <http://hdl.handle.net/10371/153432>
8. Mazumder, R.K., Salman, A.M., Li, Y., & Yu, X. (2019). 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, 26-30 May 2019. URL: <http://hdl.handle.net/10371/153463>
9. Mortazavi, M., Heo, Y., & Salman, A.M. (2019). Sensitivity of Vapor Cloud Explosion Exceedance Analysis to the Ignition Probability Model for Offshore Process Systems. *13th International Conference on Applications of Statistics and Probability in Civil Engineering*. Seoul, South Korea, 26-30 May 2019. <http://hdl.handle.net/10371/153518>
10. Salman, A. M., Li, Y., & Bastidas-Arteaga, E. (2018). Impact of Climate Change on Optimal Wood Pole Asset Management. *6th International Symposium on Life-Cycle Civil Engineering*. Ghent Belgium, 28-31 October 2018.
11. Salman, A.M. & Li, Y (2017). Multi-Hazard Risk Assessment of Electric Power Systems Subjected to Seismic and Hurricane Hazards. *16th World Conference on Earthquake Engineering*. Santiago Chile, January 9-13, 2017.
12. Salman, A. M. & Li, Y. (2017). Evaluating Climate Change Risk and Adaptation Strategies for Power Distribution Systems Subjected to Hurricanes. *12th International Conference on Structural Safety & Reliability*. Vienna, Austria. 6 – 9 August 2017.
13. Salman, A. M. & Li, Y. (2017). A probabilistic Framework for Seismic Risk Assessment of Electric Power Systems. *X International Conference on Structural Dynamics, EUROdyn 2017*. Rome, Italy. 10 – 13 September 2017.

Non-peer-reviewed Conference Proceedings & Presentations

14. Ibrar, M.A., Usama, M., & Salman, A.M. (2024). "Detecting and Quantifying the degree of tropical cyclone-related disturbance in estuaries using machine learning" *Gulf of Mexico Conference (GOMCON 2024)*. Tampa, Florida, February 19-22, 2024.
15. Salarieh, B. and Salman, A.M. (2022). Impact of climate change on hurricane risk for residential buildings in the Gulf of Mexico region. *The Gulf of Mexico Conference (GoMCon 2022)*. Baton Rouge, LA, April 25-28, 2022.
16. Mazumder, R. K., Salman, A. M., Li, Y. (2022). Application of ML algorithms in Failure Risk Analysis of Pipelines. *Engineering Mechanics Institute (EMI) 2022 Conference*. Baltimore, MD, May 31-June 3, 2022.
17. Mazumder, R. K., Salman, A. M., Li, Y., Yu, X. (2021). Risk-Informed Asset Management Decision Support Model for Interdependent Water and Road Infrastructures. *ASCE UESI Pipelines Conference*. August 3 - 6, 2021.
18. A. Salman, J.A. Schneider, J. Hayman, I. Ugwu, B. Salarieh, E. Merschman, S. Puchner., M. Fiske. (2021). Validation of additive construction properties for design of structures for planetary applications. *International Conference on Additive Manufacturing*. Anaheim, CA, November 1-5, 2021.
19. Mazumder, R. K., Salman, A. M., Li, Y., Yu, X. (2020). Seismic Damage and Renewal Cost Analysis of Buried Water Pipelines: A Python-based Computational Framework. *ASCE UESI Pipelines Conference*. San Antonio, Texas, August 9 - 12, 2020. (Won Best Poster Award)
20. Merschman, E.*, Doustmohammadi, M., Salman, A.M., Anderson, M. (2019). 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.
21. Asadi, E., Shen, Z., Zhou, H., Salman, A.M. and Li, Y. (2018). Multi-Criteria Decision Model for Risk-Based Life-Cycle Assessment of Building Structures. *The Future Smart and Resilient City*, Rice University, Houston, Texas, Oct. 4, 2018.
22. Salman, A. M., Li, Y., & Li, Q. (2018). Targeted Hardening of Electric Power Distribution Systems under Hurricane Hazard. *Structures Congress 2018*. Fort Worth, Texas, April 19–21, 2018.
23. Mazumder, R. K., Salman, A. M. & Li, Y. (2018). Risk and Resilience of Aging Water Distribution Systems. *Structures Congress 2018*. Fort Worth, Texas, April 19–21, 2018.
24. Salman, A. M. & Li, Y. (2017). Seismic Risk Assessment of Spatially Distributed Infrastructure Systems: Comparing Two Approaches. *International Conference on Structural Engineering Dynamics, ICEDyn 2017*. Ericeira, Portugal. 3 – 5 July, 2017.
25. Salman, A. M. & Li, Y. (2017). Uncertainty Quantification in Modeling the Impact of Climate Change on Hurricane Hazard. *2nd International Conference on Uncertainty Quantification in Computational Sciences and Engineering UNCECOMP 2017*. Rhodes Island, Greece. 15-17 June 2017.
26. Salman, A. M. & Li, Y. (2016). A Probabilistic Framework for Comparing the Reliability of Wood and Steel Power Distribution Poles Subjected to Hurricanes. *16th Asian-Pacific Symposium on Structural Reliability and its Application*. Shanghai, China. 28-30 May 2016.
27. Salman, A. M. & Li, Y. (2016). Impact of Climate Change on Reliability of Electric Power Distribution Systems Subjected to Hurricanes in Coastal Regions. *OCEANEXT Interdisciplinary Conference*. Nantes, France. 8 – 10 June 2016.
28. Salman, A. M. & Fang, S. (2016). Quantification of Uncertainty in Probabilistic Seismic Risk Assessment of Electric Power Systems. *MAA MathFest*. Columbus, Ohio. 3 – 6 Aug. 2016.
29. Salman, A. M. (2010). Study on High Strength Concrete with Low Calcium Fly Ash and Lime. *Curtin University of Technology Science and Engineering Conference 2010*. Miri, Malaysia. 29 – 30 November 2010.

Reports

1. Wang, X., Mazumder, R.K., Salman, A.M., Shafieezadeh, A., and Li, Y. (2024). Analyzing Capabilities and Potentials of Machine Learning and Artificial Intelligence for Risk Assessment and Management of Structures. Prepared for ASCE/SEI.
2. Marshall et al. (2019). "StEER - Hurricane Dorian: Field Assessment Structural Team (FAST-1) Early Access Reconnaissance Report (EARR)." DesignSafe-CI. <https://doi.org/10.17603/ds2-4616-1e25>
3. Roueche et al. (2019). "StEER - 3 March 2019 Tornadoes in the Southeastern US: Field Assessment Structural Team (FAST) Early Access Reconnaissance Report (EARR)." DesignSafe-CI. <https://doi.org/10.17603/ds2-qav0-t570>
4. Roueche et al. (2018). "StEER – Hurricane Michael: Field Assessment Team 1 (FAT-1) Early Access Reconnaissance Report (EARR)", DesignSafe-CI. <https://doi.org/10.17603/DS2G41M>
5. Alipour et al. (2018). "StEER - Hurricane Michael: Preliminary Virtual Assessment Team (P-VAT) Report", DesignSafe-CI. <https://doi.org/10.17603/DS2RH71>
6. Kijewski-Correa et al. (2018), "Hurricane Florence: Field Assessment Team 1 (FAT-1) Early Access Reconnaissance Report (EARR)", DesignSafe-CI. <https://doi.org/10.17603/DS2TT3G>

Invited Presentations

1. Salman, A.M. (2023). Post-disaster Roadway Network Recovery Planning Considering Social Vulnerability Factors. *2023 Alabama Section of the Institute of Transportation Engineers (ALSITE) Annual Meeting*. Gulf Shores, Alabama. June 1st, 2023.
2. Salman, A.M. (2021). Impact of climate change on future hurricane wind and storm surge hazards across US Atlantic and Gulf Coast regions. *Strengthening Infrastructure Risk Management in the Atlantic Area (SIRMA) workshop* (3rd). September 22, 2021.
3. Salman, A.M. (2021). Long-term Hurricane Risk Assessment for Coastal Residential Buildings. *ASCE Huntsville Monthly Meeting*, October 5, 2021.
4. Maintenance Optimization for Power Distribution Systems Subjected to Hurricane Hazard and Wood Pole Decay. Presented at The National Space Science and Technology Center, Department of Atmospheric Science, UAH. 31 Oct. 2018.

TEACHING EXPERIENCE

Assistant Professor, The University of Alabama in Huntsville

Aug. 2018 – present

CE 484/584 – Steel Design

CE 483/583 – Reinforced Concrete Design

CE 380 – Civil Engineering Materials

CE 659 – Probabilistic Analysis & Reliability in Civil Engineering

Graduate Teaching Assistant, Michigan Technological University

Aug. 2015 – May 2016

CE 4213 - Structural Concrete Design

CE 4223 - Steel Design I

SUPERVISING AND MENTORING ACTIVITIES

The University of Alabama in Huntsville, Aug. 2018 - present

S/No.	Student	Degree	Role	Program	Period
1	Muhammad Ahsan Ibrar	Ph.D.	Advisor	CE	Fall 2023 – present
2	Adam Ado Sabari	Ph.D.	Advisor	CE	Summer 2023 – present
3	Eric Merschman	Ph.D.	Advisor	CE	Fall 2018 – fall 2021
4	Babak salarieh	Ph.D.	Advisor	CE	Fall 2019 – fall 2022
5	Izu Albert Ugwu	M.S., Thesis	Advisor	CE	Fall 2019 – spring 2021
6	Esther Aina	M.S., Project	Advisor	CE	Fall 2020 – fall 2021
7	William Bounds	M.S., Project	Advisor	CE	Spring 2022 – Fall 2022
8	Sarah Puchner	B.S.	Honors Advisor	CE	Spring 2022
9	James Seese	B.S.	Advisor, RCEU	MAE	Summer 2020
10	Joshua Clay	B.S.	Advisor	MAE	Summer 2023
11	Ian Anzigare	B.S.	Advisor	CE	Summer 2024
12	Christian Munoz	B.S.	Advisor	CE	Fall 2024

Awards and recognitions received by students

- Student: Babak Salarieh
Award: ASCE O. H. Ammann Research Fellowship in Structural Engineering, 2022
Fellowship amount: \$8,000
- Student: Babak Salarieh
Award: SEI Student & Young Professional Scholarship, 2021
- Student: Adam Sabari
NHERI SPARC Program at the Texas Advanced Computing Center (TACC)
Amount: \$1,500

CERTIFICATIONS

- Professional Engineer, State of Alabama Board of Licensure for Professional Engineers and Land Surveyors, 2022-present
- Fundamentals of Engineering (FE), Michigan PE Board, October 2013

PROFESSIONAL EXPERIENCE

Road Sector Development Team – Federal Ministry of Works <i>Assistant Engineer</i>	Abuja, Nigeria Apr. 2011 – Apr. 2012
Bina Puri Construction Sdn. Bhd. <i>Intern</i>	Kota Kinabalu, Malaysia Dec. 2009 – Feb. 2010

TECHNICAL ACTIVITIES AND SERVICE

Conference, Symposium, and Workshops organized

- *Workshop:* Analyzing Capabilities and Potentials of Machine Learning and Artificial Intelligence for Risk Assessment and Management of Structures, May 3, 2023
Organizers: Xiaowei Wang (Tongji University), Ram Krishna Mazumder (Arcadis US Inc.), Abdullahi Salman (UAH), Abdollah Shafieezadeh (Ohio State), Yue Li (CWRU).

Funding amount: \$10,000

Funding agency: Structural Engineering Institute (SEI) of the American Society of Civil Engineers (ASCE)

- *Conference:* ICOSSAR 2022

Mini-symposium title: Advances on probabilistic life-cycle analysis of deteriorating infrastructure

Organizers: Emilio Bastidas-Arteaga (La Rochelle Université), You Dong (The Hong Kong Polytechnic University), Abdullahi Salman (UAH), Yue Li (Case Western Reserve University), Quanyang Li (Tsinghua University), and Marija Kuster Maric (University of Zagreb).

Service in Professional Organizations

- Vice chair – ASCE/SEI Task Group 3 - Risk Assessment of Structural Infrastructure Facilities and Risk-Based Decision Making, Technical Council on Life-Cycle Performance, Safety, Reliability and Risk of Structural Systems, 2022-present
- Secretary – ASCE/SEI Task Group 3 - Risk Assessment of Structural Infrastructure Facilities and Risk-Based Decision Making, Technical Council on Life-Cycle Performance, Safety, Reliability and Risk of Structural Systems, 2019-2022
- Member - Multihazard Mitigation Committee, Structural Engineering Institute – American Society of Civil Engineers (ASCE), 2018-present
- Member – Task Group 6.1 Effects of Climate Change on Infrastructures, International Association for Bridge and Structural Engineering (IABSE), 2021-present
- Member – Structural Extreme Event Reconnaissance (StEER) Network, 2019-present
- Member - Nearshore Extreme Events Reconnaissance (NEER) Association, 2019-present

Community Service

- Judge – North Alabama Regional Science & Engineering Fair (NARSEF), 2025
- Judge – North Alabama Regional Science & Engineering Fair (NARSEF), 2024

Service at UAH

Student organizations

- Advisor – Engineers Without Borders (EWB), 2021 – present
- Advisor – NSBE 2024 - present

University level

- UAH Alabama Space Grant Consortium (ASGC) Scholar/Fellow Award Committee member, 2025
- UAH ASGC Scholar/Fellow Award Committee member, 2024
- UAH ASGC Scholar/Fellow Award Committee member, 2023
- Member – Faculty Senate (Fall 2019 - Summer 2021)
 - Member – Faculty and Student Development Committee

College level

- Co-chair ISEEM Department Chair search committee, 2025
- ISEEM faculty reappointment committees, 2025
- MAE faculty reappointment committee, 2025
- Member – ISEEM faculty search committee, 2023/2024
- Member – CEE faculty search committee, 2023/2024
- Member – COE Education Strategic Planning Committee (2022)

Department level

- CEE faculty re-appointment committees, 2025
- CEE graduate education committee
- Member – faculty hiring committees (2020, 2022, 2024)

Dissertation/thesis committees

- Agnes Barnwell (PhD committee, UAH CEE, fall 2024)
- Amir Ahmadi Zahrani (PhD committee, UAH CEE, 2024)
- Trent Cowan (M.S. committee, UAH, AES Department, 2024)
- India Clark (M.S. committee, UAH CEE, spring 2025)
- Zhenglai Shen (PhD committee, UAH CEE)
- Li He (PhD committee, UAB CEE)
- Goodnews Amieghemen (PhD committee, UAB CEE, spring 2025)
- Muhammad Usama (PhD committee, UAH CEE)
- Irtiza Rafid Khan (PhD committee, UAH CEE)

Professional memberships

- American Society of Civil Engineers (ASCE)
- The International Association for Bridge and Structural Engineering (IABSE)
- American Institute of Steel Construction (AISC)
- American Concrete Institute (ACI)

Editorial

- Early Career Editorial Board Member – ASCE Natural Hazards Review

Selected peer reviews:

- Nature Energy
- Earthquake Spectra
- Transportation Research Record
- Mathematical Problems in Engineering
- SN Applied Sciences
- Reliability Engineering & System Safety
- ASCE Journal of Infrastructure Systems
- ASCE Journal of Computing in Civil Engineering
- Engineering Structures
- IEEE Transactions on Power Delivery
- Resilient cities and structures
- Frontiers in Built Environment – Bridge Engineering
- Frontiers in Built Environment – Computational Methods in Structural Engineering

PROFESSIONAL DEVELOPMENT

- NSF SRS RN Workshop 2022 The Connecting Rural and Urban Environments for Equitable Access to Transportation, Telecommunications and Energy (CREEATTE), University of Tennessee, Knoxville. August 18-19, 2022.
- Workshop on Artificial Intelligence in Natural Hazards Engineering organized by the NHERI DesignSafe at the Texas Advanced Computing Center (TACC). February 18-19, 2020. University of Texas, Austin.
- The FIU NHERI Wall of Wind (WOW) Experimental Facility (EF) and the Lehigh NHERI Advanced Technology for Large Structural Systems (ATLSS) user workshop, Dec 6-7, 2018, Florida International University.
- RAPID Natural Hazard Reconnaissance Equipment Training Workshop, July 23-26, 2019, University of Washington.
- NSF NHERI Experimental Facility workshop, July 31-August 1, Oregon State University.