Curriculum Vita
August 2025

Instructor: Mohamed Yamany, Assistant Professor
Academic Department: Engineering and Technology

University Address: Engineering and Technology
                            AG/ET
                            East Texas A&M University
                            PO Box 3011
                            Commerce, TX 75429-3011
Office Phone: 903.886.5474
University Email Address: mohamed.yamany@etamu.edu
Faculty Web Page Address: (if applicable)

EDUCATION

Doctor of Philosophy
Purdue University, 2020

Master of Science
Zagazig University, 2013

Bachelor of Science
Zagazig University, 2008

TEACHING EXPERIENCE

2024-2025, Postdoctoral Researcher, University of Wyoming
2021-2023, Assistant Professor, Zagazig University
2023-2023, Lecturer, University of Hertfordshire
2021-2023, Adjunct Professor, Arab Academy for Science and Technology & Maritime Transport
2020-2021, Postdoctoral Researcher, Iowa State University
2020-2020, Teaching Assistant, Purdue University
2008-2015, Teaching Assistant, Zagazig University
2010-2012, Teaching Assistant, El Shorouk Academy

PUBLICATIONS

26. Zaman, A.A.U., Abdelaty, A., and Yamany, M.S. (2025). "Applications of UAV Technologies in Assessment of Transportation Infrastructure Systems." *CivilEng,* 6(2), 32.

25. Yamany, M.S., Elshaboury, N., Abdelaty, A., Smadi, O., and Ksaibati, K. (2025). "Pavement Roughness Prediction on Local Roads: Machine Learning Models and Classification Granularity." *International Journal of Pavement Research and Technology,* 1-20.

24. Yamany, M.S., Khan, S., and Ksaibati, K. (2025). "Hybrid System for Prioritizing Pavement Maintenance and Rehabilitation of County Paved Roads." *International Journal of Pavement Research and Technology,* 1-16.

23. Nath, A. D., Abdelaty, A., Dilsiz, A. D., and Yamany, M. S. (2025). Energy Optimization in Residential Buildings: Evaluating PCM-CLT Wall Systems Across US Climate Zones. *Civil Engineering Journal*, 11(05).

22. Zaman, A.A.U., Abdelaty, A., Yamany, M.S., Jacobs, F., and Marzouk, M. (2025). "Integrating 3D Photogrammetry and Game Engine for Construction Safety Training." *Built Environment Project and Asset Management*

21. Yamany, M.S., Abraham, D.M., Ventresca, M., Nantung, T., and Labi, S. (2025). "Probabilistic Optimization of Pavement Preventive Maintenance Using Multi-Objective Genetic Algorithm." *Innovative Infrastructure Solutions*, 10(5), 194.

20. Ahmed, I. F., Alheyf, M., Ali, A., and Yamany, M. S. (2025). "Manholes Detecting and Mapping Using Open-World Object Detection and GIS Integration." *Civil Engineering Journal*, 11(04).

19. Ghosh, R., Yamany, M.S., and Smadi, O. (2025). "Generation of Synthetic Dataset to Improve Deep Learning Models for Pavement Distress Assessment." Innovative Infrastructure Solutions, 10(1), 41.

18. Yamany, M.S., Ghozi, M.F., Elnabwy, M.T., and Mohamed, H.A.E. (2025). "Development and Comparative Analysis of Deep Learning Models for Real-time Detection of Construction Resources." *Automation in Construction*, Under Review

17. Katipoğlu, O.M., Kartal, V., Aktürk, G., Kılınç, H.Ç., Elshabory, N., and Yamany, M.S., and Pande, C.B. (2025). "Beyond Conventional Methods: Revolutionizing Novel Modified Groundwater Drought Indices with Hybrid Artificial Neural Networks and Nature-Inspired Algorithm" *Water Resource Management*, Under Review

16. Yamany, M.S., Abraham, D.M., Nantung, T., and Labi, S., and Abaza, K.A. (2025). "Probabilistic Modeling of Pavement Performance Using Markov Chains: A Critical Review" *International Journal of pavement Engineering*, Under Review.

15. Jayana, N., Abdelaty, A., D'Angelo, D., El-Maraghy, M., Mohamed, M., and Yamany, M.S. (2025). "Causes and Impacts of Design Errors and Omissions in Highway Construction" *Construction Management and Economics*, Under Review

14. Abdelhameed, A., Yamany, M.S., Abdelaty, A., Elbeltagi E., and Mohamed, H.A.E. (2025). "Systematic Review of Construction Project Performance: Bibliometric, Scientometric, and Qualitative Analyses." *Innovative Infrastructure Solutions*, Under Review

13. Al-Jadhai, S., Welah, F., Al- Dakhel, A., Al-Harbi, M., and Yamany, M.S. (2024). "Assessment of Scope Definition for Building Projects in Saudi Arabia" *Journal of Asian Architecture and Building Engineering*, 1-16.

12. Yamany, M.S., Elbaz, M.M., Abdelaty, A., and Elnabwy, M.T. (2024). "Leveraging Convolutional Neural Networks for Efficient Classification of Heavy Construction Equipment." *Asian Journal of Civil Engineering*, 1-13.

11. Yamany, M.S., Kamal, L., Elshaboury, N., and Hosny, H.E. (2024). "Quantitative and Qualitative Review of Material Waste Management in Construction Projects." *Asian Journal of Civil Engineering*, 1-22.

10. Elshaboury, N., Yamany, M.S., Labi, S., and Smadi, O. (2024). "Enhancing Local Road Pavement Condition Prediction Using Bayesian-Optimized Ensemble Machine Learning and Adaptive Synthetic Sampling Technique." *International Journal of Pavement Engineering*, 25(1), 2365957.

9. Ahmed, I.F., Alheyf, M., and Yamany, M.S. (2024). "PlanetiQ Radio Occultation: Preliminary Comparative Analysis of Neutral Profiles vs. COSMIC and NWP Models." *Applied Sciences*, 14(10), 4179.

8. Yamany, M.S., Cawley, L., Reza, I., and Ksaibati, K. (2024). "Network-level Pavement Maintenance and Rehabilitation Planning Using Genetic Algorithm." *Innovative Infrastructure Solutions*, 9(6), 208.

7. Yamany, M.S., Abdelhameed, A., Elbeltagi, E., and Mohamed, H.A.E. (2024). "Critical Success Factors of Infrastructure Construction Projects." *Innovative Infrastructure Solutions*, 9(4), 95.

6. Zihan, Z.U.A., Smadi, O., Tilberg, M., and Yamany, M.S. (2023). "Synthesizing the Performance of Deep Learning in Vision-based Pavement Distress Detection." *Innovative Infrastructure Solutions*, 8(11), 299.

5. Abukhalil, Y., Yamany, M.S., and Smadi, O. (2022). "Detection of Unreported Treatments in Pavement Management System of Iowa DOT Using Machine Learning Classification Algorithm" *ASCE, Journal of Transportation Engineering, Part B: Pavements*, 148(4), 04022058.

4. Yamany, M.S., Abraham, D.M., and Labi, S. (2021). "Comparative Analysis of Markovian Methodologies for Modeling Infrastructure System Performance" *ASCE, Journal of Infrastructure Systems*, 27(2), 04021003.

3. Yamany, M.S., and Abraham, D.M. (2021). "Hybrid Approach to Incorporate Preventive Maintenance Effectiveness into Probabilistic Pavement Performance Models." *ASCE, Journal of Transportation Engineering, Part B: Pavements*, 147(1), 04020077.

2. Yamany, M.S., Saeed, T.U., Volovski, M., and Ahmed, A. (2020). "Characterizing the Performance of Interstate Flexible Pavements using Artificial Neural Networks and Random Parameters Regression." *ASCE, Journal of Infrastructure Systems*, 26(2), 04020010.

1. Yamany, M.S., and Elwakil, E. (2020). "Modeling of Cast-in-place Concrete Tunnel Liners Condition." *Structure and Infrastructure Engineering*, 16(8), 1147-1160.

RESEARCH GRANTS AND AWARDS

1. 2024, "Evaluating Pavement Preservation Performance in Dry Freeze and Wet Freeze Regions Using LTPP Dataset and a Questionnaire Survey." Grant # 69A3552348308 (IIJA / BIL), Project # CTIPS-034, Funded by the Center for Transformative Infrastructure Preservation and Sustainability (CTIPS), (~$200K)

2. 2024, "A Pavement Management System for Wyoming County Roads." Grant # 69A3552348308 (IIJA / BIL), Project # CTIPS-013, Funded by the Center for Transformative Infrastructure Preservation and Sustainability (CTIPS), (~$200K)

3. 2019, "Installation and Maintenance of Raised Pavement Markers at State Transportation Agencies: Synthesis of Current Practices.", Funded by Indiana Department of Transportation (INDOT), Grant # SPR-4318, (~$100K)