# MENA I. SOULIMAN, Ph.D., P.E., F. IRF., M. ASCE Ronald D. Brazzel Endowed Professor of Civil Engineering

Chair and Professor University of Texas at Tyler Department of Civil Engineering E-mail: msouliman@uttyler.edu 3900 University Blvd. RBS 1005 Tyler, TX 75799 Phone: 903-565-5892 Fax: 903-566-7337

### **EDUCATION**

**Ph.D.**, Civil, Environmental and Sustainable Engineering (Transportation/Pavement Materials), Arizona State University, Tempe, AZ (April 2012) Ph.D. Dissertation: Integrated Predictive Model for Healing and Fatigue Endurance Limit for Asphalt Concrete

M.S., Civil, Environmental, and Sustainable Engineering (Transportation/Pavement Materials), Arizona State University, Tempe, AZ (July 2009)
Thesis: Calibration of the AASHTO MEPDG for Flexible Pavements for Arizona conditions

**B.S.**, Civil Engineering, Hashemite University, Zarqa, Jordan (graduating class valedictorian) (June 2007)

Graduation Project: Design of Prestressed Concrete Continuously Supported Bridge

#### PROFESSIONAL APPOINTMENTS

*Chair*, Department of Civil and Construction Engineering and Management
University of Texas at Tyler (September 2024-Present)

**Professor**, Departments of Civil Engineering, Construction Management, and Construction Engineering, University of Texas at Tyler (September 2024-Present)

*Interim Chair*, Departments of Civil Engineering, Construction Management, and Construction Engineering, University of Texas at Tyler (July 2023-August 2024)

**Ronald D. Brazzel Endowed Professor of Civil Engineering**, Departments of Civil Engineering and Construction Management, University of Texas at Tyler (October 2021-Present)

Associate Professor, Departments of Civil Engineering and Construction Management, University of Texas at Tyler (September 2019-August 2024)

Assistant Professor, Departments of Civil Engineering and Construction Management, University of Texas at Tyler (August 2014- August 2019)

**Postdoctoral Scholar**, Department of Civil and Environmental Engineering, University of Nevada, Reno (May 2012-July 2014)

Graduate Research Associate, Civil, Environmental and Sustainable Engineering Program, Arizona State University (August 2009-April 2012)

Graduate Research Assistant, Civil, Environmental and Sustainable Engineering Program, Arizona State University (January 2008-August 2009)

#### **RESEARCH ACTIVITIES**

## I. Funded Research Proposals

University of Texas at Tyler

(July 2014-Present)

- 1. Sugarcane Bagasse Effects on Mechanical and Mechanistic Performance of Hot Mixed Asphalt Mixtures; USDA-ARS; June 2023- Present; Award amount: \$141,000 PI: M. Souliman, Co-PI: M. Isied
- 2. Develop Recommendations for Evaluating Surface Types and Aggregate Properties to Minimize Wet Weather Crashes; Texas Department of Transportation; November 2022-November 2025; Award amount: \$600,000 (UT Tyler portion: \$45,276.25); PI: D. Goehl (TTI), Co-PI: M. Souliman
- 3. SMARTP3M: Smart Pavement Monitoring, Management, and Maintenance; US Department of Transportation-Tran-SET; August 2022-Jan 2024; <u>Award amount:</u> \$150,002 (UT Tyler Portion \$80,000); **PI: M. Souliman**, Co-PI: Co-PI: S. Dessouky (UTSA)
- 4. Louis Stokes Alliance for Minority Participation (LSAMP); National Science Foundation (NSF); June 2023-September 2023; <u>Award amount: \$4,600</u>; **PI: M. Souliman**
- 5. Measuring Seal Coat Rate Field Adjustments; Texas Department of Transportation; September 2021- November 2025; Award amount: \$450,000 (UT Tyler portion: \$34,546.25); PI: D. Goehl (TTI), **Co-PI: M. Souliman**
- 6. Quantify Maximum Accumulated Seal Coat Layers for Stability; Texas Department of Transportation; September 2021- November 2025; Award amount: \$449,211 (UT Tyler portion: \$10,193.75); PI: D. Goehl (TTI), **Co-PI: M. Souliman**
- 7. Expanding the Concept of Comprehensive Area Ratio Parameter to the South-Central States: Towards Simplifying the Structural Evaluation of Flexible Pavements at the Network Level; US Department of Transportation-Tran-SET; August 2020-Feb 2022; <a href="Award amount: \$120,180">Award amount: \$120,180</a> (UT Tyler Portion \$60,180); **PI: M. Souliman**, Co-PI: Co-PI: S. Dessouky (UTSA)
- 8. Use of Ocean Plastic Waste in Road Construction, Department of Energy, SBIR/STTR DOE Award N. DE-SC0020912; June 2020-January 2021, Award amount: \$199,939 (UT Tyler portion: \$36,101); PI: M. Smith, (AltiSora), Co-PI: M. Souliman
- 9. Establish the Texas Rural Transportation Research Center (TRTRC), UT System Science and Technology Acquisition and Retention (STARs) funding; March 2020-March 2023, <a href="https://www.acceptage.com/www.acc
- 10. Tyler Bike Stripes; City of Tyler; June 2018-Jan 2022, <u>Award amount: \$186,000</u>; **PI: M. Souliman**

- 11. International Road Federation (IRF) Executive Leadership Program; International Road Federation; January 2020-February 2020; Award amount: \$1,000; **PI: M. Souliman**
- 12. Develop Surface Aggregate Classification of Reclaimed Asphalt Pavement, Texas Department of Transportation; September 2019-September 2022, <u>Award amount:</u> \$377,280 (UT Tyler portion: \$12,725); PI: F. Zhou (TTI), Co-PI: M. Souliman
- 13. Louis Stokes Alliance for Minority Participation (LSAMP); National Science Foundation (NSF); June 2019-September 2019; Award amount: \$4,600; PI: M. Souliman
- 14. Simplified Approach for Structural Evaluation of Flexible Pavements at the Network Level; US Department of Transportation-Tran-SET; May 2017-November 2018; <u>Award mount: \$184,000</u> (UT Tyler Portion \$80,000); PI: S. Romanoschi (UTA), Co-PI: M. Souliman, Co-PI: S. Dessouky (UTSA)
- 15. Documenting the Impact of Aggregate Quality on Hot Mix Asphalt (HMA) Performance, Texas Department of Transportation; September 2017-Septmebr 2019, <u>Award amount:</u> \$250,000 (UT Tyler portion: \$25,000); PI: L. Walubita (TTI), **Co-PI: M. Souliman**
- 16. Mechanistic and Economical Benefits of Fiber-Reinforced Asphalt Mixtures; Forta Corporation; March 2017-March 2018; Award amount: \$9,484; PI: M. Souliman
- 17. Mechanical, Mechanistic, and Cost Analysis for Reacted and Activated Rubber Modified Asphalt Mixtures, Consulpave International, Inc.; April 2018-May 2019; <a href="mailto:Award amount: \sum 3,000">Award amount: \sum 3,000</a>; **PI: M. Souliman**
- 18. Improved Bicycle Lane Engineering System (iBLESS); The Retail Merchants Association of Tyler Charitable Fund; November 2017-August 2019; <u>Award amount: \$ 20,634</u>; **PI: M. Souliman**
- 19. Mechanistic and Economic Benefits of Fiber-Reinforced Overlay Asphalt Mixtures; Forta Corporation; June 2018-August 2018; Award amount: \$5,018; PI: M. Souliman
- 20. Tyler Hub-and-Spoke Bike Lane Map; The Retail Merchants Association of Tyler Charitable Fund; July 2016-May 2017; <u>Award amount: \$ 20,000</u>; **PI: M. Souliman**
- 21. Pavements Skid Resistance and Friction Characterization of Tyler Bike Pathways; TEXO Construction Association; February 2017-February 2018; <u>Award amount: \$2,500</u>; **PI: M. Souliman**
- 22. Tyler Bike Lane Map Study; Greater Tyler Association of Realtors; February 2017-February 2018; Award amount: \$1,000; PI: M. Souliman
- 23. Tyler Bike Lane Map Study; City of Tyler; October 2016-October 2017; <u>Award amount:</u> \$3,000; **PI: M. Souliman**
- 24. International Road Federation (IRF) Executive Leadership Program; International Road Federation; January 2017-February 2017; <u>Award amount: \$1,750</u>; **PI: M. Souliman**
- 25. Louis Stokes Alliance for Minority Participation (LSAMP); National Science Foundation (NSF); June 2017-September 2017; <u>Award amount: \$4,950</u>; **PI: M. Souliman**

## Internally Funded Research Proposals

- 1. Design, Modeling, and Prototyping a Health Monitoring System for Residential and Commercial Buildings, UT Tyler Office of Sponsored Research, Scholarship and Sponsored Programs; September 2023-August 2024; <a href="Award amount: \$28,285">Award amount: \$28,285</a>; PI: S. Ghorshi, Co-PI: M. Souliman
- 2. SMARTP3M: Smart Pavement Monitoring, Management, and Maintenance, Presidential Interdisciplinary Grant-UT Tyler Office of Sponsored Research; August 2020-August 2021; <u>Award amount: \$13,804</u>; **PI: M. Souliman**, Co-PIs: M. Vechione, M. Shirvaikar, and Y. Li

- 3. Simplified Approach for Structural Evaluation of Flexible Pavements at the Network Level; UT Tyler Faculty Research Grant; September 2016-July 2017; Award amount: \$9,110; **PI: M. Souliman**
- 4. Tyler Bike Lane Map Study; UT Tyler Office of Sponsored Research; June 2017-August 2017; Award amount: \$5,000; **PI: M. Souliman**
- 5. Tyler Hub-and-Spoke Bike Lane Map, UT Tyler President (Dr. R. Mabry); May 2015-May 2016; Award amount: \$5,000; **PI: M. Souliman**

### University of Nevada, Reno

(August 2012-June 2014)

- 1. Hajj, E. Y., Siddharthan, R. V., Elfas, S., Lytton, R. L., **Souliman, M. I.**, "*Analysis Procedures for Evaluating Superheavy Load Movement on Flexible Pavements*", Federal Highway Administration, Washington, D.C., September 2012. (Awarded July 2013)
- 2. Design System for HMA Containing a High Percentage of RAP Material, Asphalt Research Consortium, Reno, NV (2012-2014)
- 3. Implementation of the AASHTO Mechanistic-Empirical Pavement Design Guide (MEPDG), Nevada Department of Transportation, Reno, NV (2012-2014)
- 4. Evaluation of the Pavement Rating System for Flexible Pavements, Nevada Department of Transportation, Reno, NV (2012-2014).
- 5. Validating an Endurance Limit for HMA Pavements: Laboratory Experiment and Algorithm Development, NCHRP 9-44A Project, the National Academies, Washington, DC (2009-2012).

## Arizona State University

(January 2008-May 2014)

- 1. Calibration of the AASHTO MEPDG for Flexible Pavements for Arizona conditions, Arizona Department of Transportation, Phoenix, Arizona (2008-2009).
- 2. Pavement Design Research towards the Implementation of the Mechanistic-Empirical Pavement Design Guide, Maricopa County Department of Transportation, Phoenix, Arizona (2008-2009).
- 3. Special Testing of the Arizona Department of Transportation (ADOT) Asphalt Rubber Mixtures & Asphalt Rubber Database Development, Phoenix, Arizona, (2008-2009): I-40 Lake Havasu, Arizona, I-19 Palo Parado.
- 4. Laboratory Pavement Performance Evaluation of Swedish Asphalt Concrete Mixtures, Swedish Road Administration, Göteborg, Sweden (2009).
- 5. Laboratory Pavement Performance Evaluation of Swedish Gap Graded Asphalt Concrete Mixtures Malmo E-06 Highway, Swedish Road Administration, Göteborg, Sweden (2008).

### II. Archival Journal Paper Publications (google scholar: h-index = 12; i10-index = 20)

1. Hu, S., Zhou, F., Scullion, T., Fernando, E., **Souliman, M.**, "Quantifying the Impact of Reclaimed Asphalt Pavement on the Skid Resistance of Surface Mixtures" *Transportation Research Record*, https://doi.org/10.1177/03611981231166387

- 2. Acharjee, P.\*, **Souliman, M.** "Dynamic Modulus Prediction Model Using Artificial Neural Network And Extracting A Simple Equation From The Model" Stavební Obzor Civil Engineering Journal (Under Review).
- 3. Elwardany, M., Hanna, B., **Souliman, M.**, "Impact of Truck Platooning on Pavement Fatigue Life Using Material Characterization at Various Rest Periods and Artificial Neural Networks" International Journal of Pavement Research and Technology (Under Review).
- 4. <u>Bastola, N.\*</u>, **Souliman, M.**, Dessouky, S., <u>Daoud, R.\*</u> (2023). Prediction of remaining service life for flexible pavement in the Southern Central States using FWD parameters. MedCrave Material Science & Engineering International Journal, *Vol. 7, No. 1*, pp. 8-15.
- 5. **Souliman, M.,** <u>Bastola, N.\*</u> (2022). Improved engineered scoring system for bicycle lane mapping development. MedCrave Material Science & Engineering International Journal, *Vol.* 6, *No.* 2, pp. 48-55.
- 6. <u>Proffer, L.\*, **Souliman, M.** (2022)</u>. 3-D Move Mechanistic Analysis and Cost Effectiveness of Asphalt Rubber and Polymer Modified Asphalt Pavement Under Various Axle Loading Conditions. *Journal of Materials and Engineering Structures*, Vol. 9, pp. 291-298.
- 7. Sadeghi, K., Alavi, M., **Souliman, M.** "The Effect of Recycled Asphalt Pavement Materials on Properties of Cold Patch Asphalt Mixes" Journal of Building Engineering (Under review).
- 8. <u>Proffer, L.\*</u>, Vechione, M., **Souliman, M.**, Olivares-Ortiz, Y., Hickey, W. "CMI3: Corozal Metric for Intersection Improvement and Implementation: A Tool to Improve Vulnerable Road User Safety in a Developing Country" Journal of Belizean Research (Under Review).
- 9. <u>Zeiada, W., Dabous, S., Al-Rozouq, r., Hamas, K.,</u> **Souliman, M.**, Mirou, S. "Effect of air voids and asphalt content changes on laboratory and simulated long-term fatigue performance of asphalt concrete pavements" *Innovative Infrastructure Solutions Journal*, 2023. Vol. 8. <a href="https://doi.org/10.1007/s41062-022-01023-3">https://doi.org/10.1007/s41062-022-01023-3</a>
- 10. <u>Bastola, M.\*</u>, Vechione, M., Elshaer, M., **Souliman, M.**, (2021). Artificial neural network prediction model for in situ resilient modulus of subgrade soils for pavement design applications. Innovative Infrastructure Solutions Journal, 2021. Vol. 7.
- 11. <u>Bastola, N.\*</u>, **Souliman, M.**, Vechione, M. "Preliminary study on rutting performance of pavement structures under the effect of future autonomous vehicle movements" *Innovative Infrastructure Solutions Journal*, 2023.
- 12. <u>Acharjee, P.\*</u>, **Souliman, M.**, <u>Karki, S.\*</u>, Saygili, G. "Artificial Neural Network Fatigue Endurance Limit Model using Uniaxial Tension-Compression Fatigue Tests" *International Journal of Pavement Research and Technology* (Under review)
- 13. Zeiada, W., Obaid, L., Alani, S., Alozi, A., **Souliman, M.** "The Development of Predictive Machine Learning Models For Fatigue Endurance Limit Of Asphalt Concrete Pavements Based On The Volumetric Properties Towards Perpetual Pavement Design" International Journal of Pavement Engineering (Under Review).
- 14. <u>Bastola, N.\*</u>, **Souliman, M.**, Dessouky, S., <u>Daoud, R.\*</u> "Structural health assessment of pavement sections in the southern central United States using FWD parameters" Frontiers in Built Environment Journal (2022) 8:1026469 <a href="https://doi.org/10.3389/fbuil.2022.1026469">https://doi.org/10.3389/fbuil.2022.1026469</a>

- 15. Acharjee, K.\*, **Souliman, M**., Khalifah, R.\*, Elwardany, M. "Frequency- and Temperature-Dependent Dynamic Shear Modulus and Phase Angle Prediction Models Based on Existing Asphalt Binder Viscosity Data Using Artificial Neural Network (ANN)" Construction and Buliding Materails Journal (Under Review).
- 16. Khalifah, R.\*, Souliman, M., Saygili, G., Loganathan, K.\* (Under Review). "Predicting Subgrade Resilience Modulus and Soil—Water Characteristic Curve Coefficients Using Artificial Neural Network (ANN) Models" *Journal of Infrastructure Preservation and Resilience*.
- 17. <u>Acharjee, P.\*</u>, **Souliman, M.**, Freyle, F., Fuentes, L. (Under Review). Development of Dynamic Modulus Prediction Model Using Artificial Neural Network for Colombian Mixtures . *ASCE Journal of Materials in Civil Engineering*.
- 18. Elwardany, M., Hanna, B., **Souliman, M.** "Estimating the impact of automated truck platoons on asphalt pavement's fatigue life using artificial neural networks" International Journal of Pavement Engineering, 23:12, 4223-4235, DOI:10.1080/10298436.2021.1938046
- 19. Walubita, L., Mahmoud, E., Fuentes, L., Prakoso, A., Lee, S., **Souliman, M.**, & Komba, J. (2020). "Correlating the asphalt-binder high-temperature properties (DSR) to HMA permanent deformation (RLPD) and field rutting: A laboratory-field study" *Construction and Building Materials*, *Vol.* 262, <a href="https://doi.org/10.1016/j.conbuildmat.2020.120761">https://doi.org/10.1016/j.conbuildmat.2020.120761</a>
- 20. **Souliman, M.**, <u>Gc, H.\*, Mohammed, Z.\*</u> "Enhanced Flexible Pavement Performance Using Treated Compared to Untreated Aggregate Bases: A Comparative Case Study in the Southern United States" Infrastructures MDPI Journal 2021, 6, 110. <a href="https://doi.org/10.3390/infrastructures6080110">https://doi.org/10.3390/infrastructures6080110</a>
- 21. Khalifah, R.\*, **Souliman, M.**, <u>Bajusair, M.\*</u> "Development of Prediction Model for Rutting Depth Using Artificial Neural Network" CivilEng MDPI Journal 2023, 4, 174–184. <a href="https://doi.org/10.3390/civileng4010011">https://doi.org/10.3390/civileng4010011</a>
- 22. <u>Stephens, D.\*</u>, **Souliman, M.**, Vechione, M., Shirvaikar, M., Li, Y. "Development of a Smartphone Application Serving Pavement Management Engineers" *Transportation Research Record*, 2022, Vol. 2676(6) 182–196.
- 23. <u>Isied, M.\*</u>, **Souliman, M.**, Zeiada, W., <u>Bastola, N.\*</u> "Predictive Artificial Neural Network Laboratory Fatigue Endurance Limit Model for Asphalt Concrete Pavements Based on the Volumetric Properties and Loading Conditions" *Transportation Research Record*, March 2021. https://doi.org/10.1177/0361198121999657
- 24. <u>Isied, M.\*</u>, **Souliman, M.** (2021). "Neural Network Modeling For the Rotational Viscosity of Reacted and Activated Rubber-Modified Binders" *ASTM-Advances in Civil Engineering Materials* Vol. 10, No. 1 (2021): 140 153. https://doi.org/10.1520/ACEM20200114
- 25. <u>Bastola, N.\*</u>, **Souliman, M.**, Zeiada, W., Helal, H., <u>Mohammed, Z.\*</u> "Evaluating the Structural Capacity of Flexible Pavements at the Network Level Using Layered Elastic Analysis" *Innovative Infrastructure Solutions Journal*, 2021. Vol. 6. <a href="https://doi.org/10.1007/s41062-021-00514-z">https://doi.org/10.1007/s41062-021-00514-z</a>
- 26. Bastola, N.\*, **Souliman, M.**, Mohammed, Z.\* "Preliminary Finite Element Modeling of Asphalt Material Using ANSYS" Civil Engineering Beyond Limits, 2021. https://doi.org/10.36937/cebel.2021.001.005.

- 27. Zeiada, W., **Souliman, M.**, Arab, M., Underwood, B., and Kaloush, K., "Fatigue behaviour of conventional and rubber-modified gap-graded asphalt mixtures using bending and axial fatigue tests" *Australian Journal of Civil Engineering*, December 2020. DOI: 10.1080/14488353.2020.1854943.
- 28. Walubita, L., Nyamuhokya, T., Torres P., O., Fuentes, L., Tanvir, H., and **Souliman, M.** "Laboratory evaluation of grid-reinforced HMA beams using the flexural bending-beam fatigue (FBBF) test in load-controlled mode" *International Journal of Pavement Engineering*, 2020. DOI: 10.1080/10298436.2020.1795659.
- 29. **Souliman, M. I.,** <u>Gc., H.\*, Isied, M.\*,</u> Walubita, L., Sousa, J., <u>Bastola. N.\*,</u> "Mechanistic analysis and cost-effectiveness evaluation of asphalt rubber mixtures" *Road Materials and Pavement Design Journal*, 2020. https://doi.org/10.1080/14680629.2020.1735492
- 30. <u>Bastola, N.\*</u>, **Souliman, M.** "Change In Resilient Modulus Of Base Layers In Asphalt Pavement Structures Over Texas" *Stavební Obzor Civil Engineering Journal*, Vol. 2-2020, pp. 182-191, DOI 10.14311/CEJ.2020.02.0016.
- 31. **Souliman, M.,** <u>Gc. H.\*, Isied, M.\*,</u> and Walubita, L., "Treated versus Untreated Aggregate Bases for Flexible Pavements: Nationwide Comparative Case Study" *Transportation Research Record*, February 2020, Vol. 2674, No. 2, pp. 225-236.
- 32. <u>Bastola, N.\*, Souliman, M., Tripathi, A.\*, Pearson, A.\*, (2020)</u>. Mechanistic Analysis and Economic Benefits of Fiber-Reinforced Asphalt Overlay Mixtures. *Journal of Materials and Engineering Structures*, Vol. 7, No. 1, pp. 83-96.
- 33. **Souliman, M.,** <u>Bastola, N.\*,</u> Zeiada, W., (2020). Improvement of Fatigue and Rutting Performance with Different Base Treatments. MedCrave Material Science & Engineering International Journal, *Vol. 4*, *No. 5*, pp. 122-129.
- 34. <u>Gc, H.\*</u>, **Souliman, M.**, Zeiada, W., & <u>Isied, M.\*</u> (2019). Mechanistic Assessment of Fatigue Performance and Cost Analysis of Pavement Overlays: Comparison between Conventional Hot Mixed Asphalt, Asphalt Rubber, and Polymer-Modified Mixtures. *ASTM-Advances in Civil Engineering Materials*, 8(1), DOI: 10.1520/ACEM20190118.
- 35. <u>Loganathan, K.\*, Isied, M.\*</u>, Coca, A., **Souliman, M.**, Romanoschi, S., & Dessouky, S. (2019). Estimated Remaining Fatigue Life of Flexible Pavements Based on the Normalized Comprehensive Area Ratio Deflection Parameter. *Canadian Journal of Civil Engineering*. https://doi.org/10.1139/cjce-2019-0023
- 36. <u>Loganathan, K.\*, Isied, M.\*</u>, Coca, A., **Souliman, M.**, Romanoschi, S., & Dessouky, S. (2019). Development of comprehensive deflection parameters to evaluate the structural capacity of flexible pavements at the network level. *International Journal of Pavement Research and Technology*, *12*(4), 347–355.
- 37. <u>Loganathan, K.\*, Isied, M.\*</u>, & **Souliman, M.** (2019). Temperature prediction model for flexible pavements at various depths for the States of Arizona and Minnesota. *International Journal of Forensic Engineering*, 4(2), 145–155.
- 38. **Souliman, M.**, Zeiada, W., Arab, M., & Kaloush, K. "Effect of asphalt binders with identical PG grading from different suppliers on the laboratory performance of asphalt mixture" *International Journal of Pavement Research and Technology*, 2019. 12(2), 117–124.
- 39. **Souliman, M.**, <u>Tripathi, A.\*, & Isied, M.\*</u> (2019). Mechanistic Analysis and Economic Benefits of Fiber-Reinforced Asphalt Mixtures. *ASCE Journal of Materials in Civil Engineering*, *31*(8), 04019142.

- 40. **Souliman, M.**, <u>Tripathi, A.\*</u>, Walubita, L., & <u>Isied, M.\*</u> (2019). Performance evaluation of jointed plain concrete pavements with sealed and unsealed joints in North Texas. *Canadian Journal of Civil Engineering*, 46(999), 601–608.
- 41. Zavagna, P.\*, Khanal, A.\*, & **Souliman, M.** (2019). LTPP Data Analysis: Factors Affecting Pavement Roughness for the State of California. *Journal of Materials and Engineering Structures*, 5(4), 319–332.
- 42. Walubita, L., Nyamuhokya, T., Komba, J., Tanvir, H., **Souliman, M.**, & Naik, B. (2018). Comparative assessment of the interlayer shear-bond strength of geogrid reinforcements in hot-mix asphalt. *Construction and Building Materials*, 191, 726–735.
- 43. <u>Isied, M.\*</u>, **Souliman, M. I.**, "Integrated Predictive Artificial Neural Network Fatigue Endurance Limit Model for Asphalt Concrete Pavements" Canadian Journal of Civil Engineering, July 2018, https://doi.org/10.1139/cjce-2018-0051
- 44. <u>Zavagna, P.\*</u>, **Souliman, M. I.**, "Engineering Scoring System for Bicycle Lane Mapping Development: Case Study on Tyler, Texas, USA)" Jordan Journal of Civil Engineering, Vol. 12, No. 4, 2018.
- 45. **Souliman, M.I.**, Abd El-Hakim, R., <u>Davis, M.\*</u>, Gc, H., Walubita, L., "Mechanistic and Economic Impacts of Using Asphalt Rubber Mixtures at Various Vehicle Speeds" *ASTM International: Advances in Civil Engineering Materials Journal*, DOI: 10.1520/ACEM20170104, 2018
- 46. Zeiada, W., Gudipudi, P., Underwood, S., **Souliman, M.** "Effect of Loading Waveform Pattern and Rest Period on Fatigue Life of Asphalt Concrete Using Viscoelastic Continuum Damage Model" *Transportation Research Record*, January 2018 (Accepted).
- 47. Zhang, J., Simate, G., Hu, X., **Souliman, M**., Walubita, L. "*Impact of Recycled Asphalt Materials on Asphalt Binder Properties and Rutting and Cracking Performance of Plant-Produced Mixtures*" Construction and Buliding Materials Journal, Vol 155, pp. 654-663, November 2017.
- 48. **Souliman, M**., Mamlouk, M., <u>Eifert, A.\*</u> "*Mechanistic Analysis and Cost-Effectiveness of Rubber and Polymer Modified Asphalt Mixtures*" ASTM International: Advances in Civil Engineering Materials Journal, Vol 6, No. 1, 2017.
- 49. Hu, X., Faruk, A., Zhang, J., **Souliman, M**., Walubita, L., "*Effects of tire inclination (turning traffic) and dynamic loading on the pavement stress—strain responses using 3-D finite element modeling*" International Journal of Pavement Research and Technology, Vol 10, No. 4, July 2017, pp. 304-314.
- 50. Mamlouk, M., **Souliman, M**., "Simple Approach for Designing Sustainable Pavement with Self-Healing Fatigue Cracking" ASCE Journal of Transportation Engineering, Part B: Pavements, Vol 143, No. 2 June 2017.
- 51. <u>Loganathan, K.\*</u>, **Souliman, M.I.**, "Prediction of Average Annual Surface Temperature for both Flexible and Rigid Pavements" *Journal of Materials and Engineering Structures*, Vol. 4 pp. 259–267, December 2017.
- 52. Walubita, L., Nyamuhokya, T., Romanoschi, S. Hu, X., **Souliman, M.** "A Mechanistic-Empirical Impact Analysis of Different Truck Configurations on a Jointed Plain Concrete Pavement (JPCP)" *Stavební Obzor Civil Engineering Journal*, Vol. 4-2017, pp.507-529, DOI: https://doi.org/10.14311/CEJ.2017.04.0041, 2017.

- 53. **Souliman, M. I.**, Eifert, A.\*, "Mechanistic and Economical Characteristics of Asphalt Rubber Mixtures" Advances in Civil Engineering, Volume 2016 (2016), Article ID 8647801, http://dx.doi.org/10.1155/2016/8647801. pp. 1-6.
- 54. Salini, R., Xu, B., **Souliman, M.** "Impact of Image Resolution on Pavement Distress Detection Using PICUCHA Methodology" Stavební Obzor Civil Engineering Journal, Vol. 4-2016, pp. 1-11, DOI: https://doi.org/10.14311/CEJ.2016.04.0024, 2016.
- 55. **Souliman, M. I.**, Eifert, A.\*, "Mechanistic and Economical Characteristics of Asphalt Rubber Mixtures" Highway Engineering Australia, Volume 47, No. 6. (2016).
- Souliman, M. I., Shankar, K.\*, Walubita, L. "Effectiveness of Rehabilitation Options on Roughness Using LTPP Section Data for New Mexico" ASCE Special Edition: Innovative and Sustainable Solutions in Asphalt Pavements. 2016: pp. 137-145. doi: 10.1061/9780784480052.017.
- 57. **Souliman, M.**, Mamlouk, M., <u>Eifert, A.\*</u>, "Cost-effectiveness of rubber and polymer modified asphalt mixtures as related to sustainable fatigue performance" Elsevier-Procedia Engineering Journal, 2016, Volume 145, pp. 404–411.
- 58. Mamlouk, M. S., and **Souliman, M. I.**, "Reducing Inconsistency of HMA Flexure Fatigue Testing" ASCE Journal of Materials in Civil Engineering, 2016, Volume 28, Issue 2, pp. 04015131,1-8.
- 59. Chamoun, Z., **Souliman, M**., "Mechanistic Evaluation of the Long Term Performance Characteristics of Warm Mix Additives in Modified Asphalt Mixtures" Springer Journal-8th Rilem International Conference on Mechanisms of Cracking and Debonding in Pavements, France, 2016, Volume 13, pp. 411-416.
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- 77. **Souliman, M. I.**, and Kaloush, K. E., "Evaluation of Fatigue Criteria for Asphalt Pavements", Technology Interface International Journal, Volume 11, No. 1, 2010, pp. 35-46.
- 78. **Souliman, M. I.**, Mamlouk, M. S., El-Basyouny, M., and Zapata, C. E., "Calibration Of The AASHTO MEPDG For Designing Flexible Pavements In Arizona Conditions" International Journal of Pavements, Volume 9, Issue 1-2-3, 2010, pp. 2-13.

<sup>\*</sup> Published work with a UT Tyler student

### **III.** Peer – Reviewed Conference Papers Publications

- 1. <u>Acharjee, P.\*</u>, **Souliman, M.**, Freyle, F., Fuentes, L. (2023). Development of Dynamic Modulus Prediction Model Using Artificial Neural Network for Colombian Mixtures. In *Transportation Research Board 102<sup>nd</sup> Annual Meeting*, Transportation Research Board, Washington, D.C.
- 2. <u>Acharjee, P.\*</u>, **Souliman, M**., "Pavement Roughness Prediction Model for Texas with Artificial Neural Network (ANN)" TexITE Spring Meeting, Lubbock, TX, April 12-14, 2023. 1st Place in the Texas ITE District.
- 3. Hu, S., Zhou, F., Scullion, T., Fernando, E., **Souliman, M.**, (2023). Quantify The Impact of Reclaimed Asphalt Pavement on Skid Resistance of Surface Mixtures. In *Transportation Research Board 102<sup>nd</sup> Annual Meeting*, Transportation Research Board, Washington, D.C.
- 4. Khalifah, R.\*, **Souliman, M.**, Saygili, G., <u>Loganathan, K.\*</u> (2023). Predicting Subgrade Resilience Modulus and Soil–Water Characteristic Curve Coefficients Using Artificial Neural Network (ANN) Models. In *Transportation Research Board* 102<sup>nd</sup> Annual Meeting, Transportation Research Board, Washington, D.C.
- 5. Acharjee, K.\*, Souliman, M., Khalifah, R.\*, Elwardany, M. (2023). Frequency-and Temperature-Dependent Dynamic Shear Modulus and Phase Angle Prediction Models Based on Existing Asphalt Binder Viscosity Data Using Artificial Neural Network (ANN). In *Transportation Research Board 102<sup>nd</sup> Annual Meeting*, Transportation Research Board, Washington, D.C.
- 6. Smith, M., Beetge, J., <u>Bastola, N.\*</u>, **Souliman, M.** (2022). Mechanical Performance and Mechanistic Evaluation of Hot Mixed Asphalt Mixtures Modified with Ocean Plastic Waste. In *Transportation Research Board 101st Annual Meeting*, Transportation Research Board, Washington, D.C.
- 7. <u>Stephens, D.\*</u>, **Souliman, M.**, Vechione, M., Shirvaikar, M., Li, Y. (2022). Preliminary Development of a Smartphone Application as An Asset to Pavement Management Engineers. In *Transportation Research Board 101st Annual Meeting*, Transportation Research Board, Washington, D.C.
- 8. <u>Karki, S.\*</u>, **Souliman, M.**, Saygili, G. (2022). Artificial Neural Network Fatigue Endurance Limit Model Using Uniaxial Tension- Compression Fatigue Tests. In *Transportation Research Board 101st Annual Meeting*, Transportation Research Board, Washington, D.C.
- 9. <u>Bastola, N.\*</u>, **Souliman, M**., Dessouky, S. (2022). Prediction of Remaining Service Life for Flexible Pavement in The Southern Central States Using FWD Parameters. In *Transportation Research Board 101st Annual Meeting*, Transportation Research Board, Washington, D.C.
- 10. Shirvaikar, M., **Souliman, M**., Dessouky, S. "Estimation of road surface quality using real-time video analysis" Real-Time Image Processing and Deep Learning Conference, Orlando, Florida, April 30<sup>th</sup> to May 4<sup>th</sup>, 2023.
- 11. <u>Bastola, N.\*</u>, **Souliman, M.I.**, Dessouky, S. (2022). "Structural Health Assessment of Pavement Sections in the Southern Central States with FWD Parameters", Transportation Consortium of South-Central States (Tran-SET) Conference.
- 12. <u>Isied, M.\*</u>, **Souliman, M**. "Viscosity Prediction Model for Reacted and Activated Rubber Modified Binders Utilizing Artificial Neural Networks" Rubberized Asphalt Rubber Conference, Malaga, Spain, June 27-29<sup>th</sup>, 2022.

- 13. <u>Proffer, L.\*</u>, **Souliman, M**. "3D-Move Mechanistic Analysis and Cost Effectiveness of Asphalt Rubber Pavement Under Various Axle Loading Conditions" Rubberized Asphalt Rubber Conference, Malaga, Spain, June 27-29<sup>th</sup>, 2022.
- 14. **Souliman, M.**, Saygili, G., <u>Yarrapureddi, H.\*</u>, (2022). Engineering Properties of Treated Subgrade Soils in Cold Weather Environments. In *XVI World Winter Service and Road Resilience Congress, February 7-11, 2022, Calgary, Canada.*
- 15. <u>Bastola, N.</u>\*, **Souliman, M**., Dessouky, S. (2022). Incorporating Temperature Based Finite Element Approach in Effectively Assessing the Structural Capacity of Flexible Pavements. In *XVI World Winter Service and Road Resilience Congress, February 7-11*, 2022, Calgary, Canada.
- 16. <u>Lama, P.\*</u>, **Souliman, M**. "Rutting Prediction Model based on Environmental and Traffic condition on Texas State Using Artificial Neural Network" 8<sup>th</sup> Annual LSUS Regional Student Scholars Forum. March 2023.
- 17. Khalifah, R.\*, **Souliman, M**. "Development of Prediction Model for Rutting Depth Using Artificial Neural Network" 8<sup>th</sup> Annual LSUS Regional Student Scholars Forum. March 2023.
- 18. <u>Acharjee, P.\*</u>, **Souliman, M**. "Dynamic Shar Modulus and Phase Angle Prediction Model for Modified Binder Using Artificial Neural Network (ANN)" 8<sup>th</sup> Annual LSUS Regional Student Scholars Forum. March 2023.
- 19. <u>Acharjee, P.\*</u>, **Souliman, M**. "International Roughness Index Prediction Model for the State of Louisiana Based on Climatic and Traffic Conditions" 7<sup>th</sup> Annual LSUS Regional Student Scholars Forum. March 2022.
- Khalifah, R.\*, Souliman, M. "Predicting subgrade resilience modulus and the Soil–Water Characteristic Curve coefficients using Artificial Neural Network model (ANN)" 7<sup>th</sup> Annual LSUS Regional Student Scholars Forum. March 2022.
- 21. <u>Bastola, N.\*</u>, **Souliman, M.**, Dessouky, S. " Assessing the Structural Health of the Pavement Sections using FWD Parameters" International Symposium of Asphalt Pavements Conference, Costa Rica, October 25-27<sup>th</sup> 2022.
- 22. **Souliman, M.**, Smith, M., Beetge, J., (2023). Paving the Way for a Cleaner Future: How Ocean Plastic Waste Can Fuel Sustainable Pavement Industries. In *International Road federation R2T Conference and Exhibition, November 14-17, 2023, Phoenix, AZ, USA*.
- 23. <u>Bastola, N.\*, Acharjee, P.\*,</u> **Souliman, M.**, Dessouky, S. (2023). Implementing Temperature-Based Artificial Neural Network (ANN) Modeling in Assessing Pavement Structural Conditions. In *10th International Conference of the European Asphalt Technology Association, Poland, 2023.*
- 24. <u>Acharjee, P.\*</u>, **Souliman, M.**, (2023). Temperature and Frequency Based Dynamic Shear Modulus (|Gb\*|) and Phase Angle (δb) Prediction Model from Viscosity Data for Modified Binder Using Artificial Neural Network (ANN). In *10th International Conference of the European Asphalt Technology Association, Poland, 2023.*
- 25. <u>Acharjee, P.\*</u>, **Souliman, M.**, Freyle, F., Fuentes, L. (2023). Development of Dynamic Modulus Prediction Model Using Artificial Neural Network for Colombian Mixtures. In 2<sup>nd</sup> International Data Science for Pavements Symposium, 2023.
- 26. <u>Lama, P.\*</u>, **Souliman, M.**, (2023). Rutting Prediction Model based on Environmental and Traffic condition in Texas State Using Artificial Neural Network. In 2<sup>nd</sup> *International Data Science for Pavements Symposium*, 2023.

- 27. Elwardany, M., Hanna, B., **Souliman, M.**, (2022). Truck Platooning's Impact on Pavement Fatigue Life based on Material Characterization with Various Rest Periods and Artificial Neural Networks Modeling. In 1st International Data Science for Pavements Symposium, 2022.
- 28. Acharjee, P.\*, & **Souliman, M.**, Elshaer, M. (2022). Development of Subgrade Resilient Modulus Prediction Model Based on Historical Field Database Using Artificial Neural Network Analysis. In *1<sup>st</sup> International Data Science for Pavements Symposium*, 2022.
- 29. Acharjee, P.\*, & **Souliman, M.** (2022). Development of Dynamic Modulus Predictive Model Using Artificial Neural Network (ANN). In *American Society for Engineering Education (ASEE) Gulf Southwest Conference* 2022. Prairie View, TX: American Society of Engineering Education.
- 30. Smith, M., Beetge, J., <u>Bastola, N.\*</u>, **Souliman, M.** (2023). Modification of Asphalt Binders with Ocean Plastic Waste: Characterization of Binder Performance. In *ASCE Airfield and Highway Pavements 2023 Conference*. American Society of Civil Engineers, Austin, TX, June 2023. https://ascelibrary.org/doi/abs/10.1061/9780784484906.005
- 31. Mutyala, P.\*, **Souliman, M.**, Loganathan, K. (2023). Quantifying the Influence of Geosynthetics on Pavement Performance against Rutting. In *ASCE Airfield and Highway Pavements 2023 Conference*. American Society of Civil Engineers, Austin, TX, June 2023. https://ascelibrary.org/doi/abs/10.1061/9780784484890.037
- 32. **Souliman, M.**, Bastola, N.\*, Elshaer, M., (2022). Flexible Pavement Performance with Lime Treated Bases. Eleventh International Conference on the Bearing Capacity of Roads, Railways and Airfields, Volume 3 Hoff, Mork & Saba (eds) © 2022 copyright the Author(s), ISBN 978-1-032-12052-2
- 33. <u>Acharjee, P.\*</u>, **Souliman, M.**, Freyle, F., Fuentes, L. (2023). Development of Artificial Neural Network-based Dynamic Modulus Prediction Models for Colombian Mixtures Similar to Witczak and Hirsch Model. In *East Texas Research Conference*. Tyler, TX: University of Texas at Tyler.
- 34. <u>Lama, P.\*</u>Souliman, M. (2023). Rutting Prediction Model based on Environmental and Traffic condition in Texas State Using Artificial Neural Network. In *East Texas Research Conference*. Tyler, TX: University of Texas at Tyler.
- 35. Khalifah, R.\*Souliman, M. (2023). Predicting pothole number and area using artificial neural network. In *East Texas Research Conference*. Tyler, TX: University of Texas at Tyler.
- 36. **Souliman, M.** (2022). Serving East-Texas Rural Transportation Needs. In *East Texas Research Conference*. Tyler, TX: University of Texas at Tyler.
- 37. Reddy Yarrapureddi, H.\*, Saygili, G., **Souliman, M.** (2020). PROPERTIES OF TREATED SOILS. In *East Texas Research Conference*. Tyler, TX: University of Texas at Tyler.
- 38. **Souliman, M.**, <u>Gc, H.\*</u>, <u>Isied, M.\*</u>, (2020). Treated Versus Untreated Aggregate Bases for Flexible Pavements. In *East Texas Research Conference*. Tyler, TX: University of Texas at Tyler.
- 39. Khalifah, R.\*, & Souliman, M. (2024). Developing a Model to predict Bleeding Areas in Asphalt Pavements Using an Artificial Neural Network. In 8th International Conference Bituminous Mixtures and Pavements (Accepted). Thessaloniki, Greece: CRC Press.

- 40. <u>Lama, P.\*</u>, & **Souliman, M.** (2024). Rutting Prediction Model based on Environmental and Traffic conditions of the State of Texas Using Artificial Neural Network. In *8th International Conference Bituminous Mixtures and Pavements* (Accepted). Thessaloniki, Greece: CRC Press.
- 41. Acharjee, P.\*, & **Souliman, M.** (2024). Artificial Neural Network-based Prediction Model for Soil-Water Characteristics Curve Coefficients from Soil Index Properties. In 8th International Conference Bituminous Mixtures and Pavements (Accepted). Thessaloniki, Greece: CRC Press.
- 42. **Souliman, M.** "Assessing the Structural Health of the Pavement Sections using FWD Parameters" The international Conference on Advanced Civil Engineering and Smart Structures, Xi' an, China, October 25-26, 2022.
- 43. Smith, M., Beetge, J., <u>Bastola, N.\*</u>, **Souliman, M.** "Exploring Pavement Industries as a Sustainable Market for Ocean Plastics Waste" the 2022 Association of Asphalt Paving Technologists Annual Meeting, San Antonio, TX, 2022.
- 44. <u>Bastola, N.\*</u>, **Souliman, M.I.**, Dessouky, S. (2021). "Assessing Pavement Surface Deflections in the South-Central States with Software Simulations", Transportation Consortium of South-Central States (Tran-SET) Conference.
- 45. <u>Bastola, N.\*</u>, **Souliman, M.**, <u>Tripathi, A.\*</u>, <u>Pearson, A.\*</u> (2021). Mechanistic Performance Analysis of Fiber-Reinforced Asphalt Pavement Overlays. 6<sup>th</sup> GeoChina International Conference. <a href="https://link.springer.com/chapter/10.1007/978-3-030-79638-9">https://link.springer.com/chapter/10.1007/978-3-030-79638-9</a> 7
- 46. Reddy Yarrapureddi, H.\*, Saygili, G., **Souliman, M.** (2021). CBR Strength of Treated Subgrade Soils. 6<sup>th</sup> GeoChina International Conference. <a href="https://link.springer.com/chapter/10.1007/978-3-030-79641-9\_1">https://link.springer.com/chapter/10.1007/978-3-030-79641-9\_1</a>
- 47. **Souliman, M.**, <u>Bastola, N.\*</u> (2021). Performance Analysis of Flexible Pavements with Base Lime. 6<sup>th</sup> International Conference on Road and Rail Infrastructure, 20-21 May, 2021, Pula, Croatia. https://cetra.grad.hr/ocs/index.php/cetra6/cetra2020/paper/view/1057
- 48. <u>Bastola, N.\*</u>, **Souliman, M.**, Dessouky, S. (2021). Utilization of Finite Element Analysis towards the Evaluation of the Structural Capacity of Flexible Pavements. In *ASCE Airfield and Highway Pavements 2021 Conference* (accepted). American Society of Civil Engineers. <a href="https://ascelibrary.org/doi/10.1061/9780784483503.012">https://ascelibrary.org/doi/10.1061/9780784483503.012</a>
- 49. Elwardany, M., Hanna, B., **Souliman, M.**, (2021). Estimation of Automated Truck Platooning's Impacts on the Fatigue Life of Flexible Pavements Using Machine Learning Algorithms. In *Transportation Research Board 100th Annual Meeting*. Virtual: Transportation Research Board.
- 50. <u>Bastola, M.\*</u>, **Souliman, M.**, Vechione, M. (2021). Preliminary Study on Rutting Performance of Pavement Structures under the Effect of Future Autonomous Vehicle Movements. In *Transportation Research Board 100th Annual Meeting*. Virtual: Transportation Research Board.
- 51. <u>Bastola, M.\*</u>, Vechione, M., Elshaer, M., **Souliman, M.**, (2021). Artificial Neural Network Prediction Model for In-Situ Resilient Modulus of Subgrade Soils for Pavement Design Applications . In *Transportation Research Board 100th Annual Meeting*. Virtual: Transportation Research Board.
- 52. **Souliman, M.**, <u>Bastola, N.\*</u>, Zeiada, W. (2020). Mechanistic and Cost-Effectiveness Analysis of Cement Treated Bases in Flexible Pavement. 5<sup>th</sup> World Congress on

- Civil, Structural, and Environmental Engineering. Lisbon, Portugal. DOI: 10.11159/icgre20.157
- 53. Mohammed, Z.\*, **Souliman, M**. "Development of an empirical model to predict distresses in flexible pavements for the state of Texas" 6<sup>th</sup> Annual LSUS Regional Student Scholars Forum. March 2021.
- 54. <u>Bastola, N.\*</u>, **Souliman, M.**, <u>Zavagna, P.\*</u>, <u>& Alvarez, G\*</u>. (2020). Improved Engineered Scoring System for Bicycle Lane Mapping Development. In *Transportation Research Board 99th Annual Meeting*. Washington, D.C.: Transportation Research Board.
- 55. <u>Isied, M.\*</u>, **Souliman, M.** (2020). Laboratory Evaluation of the Rotational Viscosity of Reacted and Activated Rubber Modified Binders. In *Transportation Research Board 99th Annual Meeting*. Washington, D.C.: Transportation Research Board.
- 56. <u>Isied, M.\*</u>, **Souliman, M.** (2020). Neural Network Modeling For the Rotational Viscosity of Reacted and Activated Rubber Modified Binders. In *Transportation Research Board 99th Annual Meeting*. Washington, D.C.: Transportation Research Board.
- 57. **Souliman, M.**, <u>Gc. H.\*</u>, <u>Isied, M.\*</u>, and Walubita, L., (2020). Treated versus Untreated Aggregate Bases for Flexible Pavements: Nationwide Comparative Case Study. In *Transportation Research Board 99th Annual Meeting*. Washington, D.C.: Transportation Research Board.
- 58. Walubita, L., Mahmoud, E., Prakoso, A., **Souliman, M.** Lee, S. (2020). Correlating the Asphalt-Binder High-Temperature Properties (DSR) to HMA Permanent Deformation (RLPD) and Field Rutting: A Laboratory-Field Study. In *Transportation Research Board 99th Annual Meeting*. Washington, D.C.: Transportation Research Board.
- 59. <u>Isied, M.\*</u>, & **Souliman, M.** (2019). Prediction model for subgrade soil resilient dynamic modules utilizing basic soil characteristics for the state of Louisiana. In *7th International Conference Bituminous Mixtures and Pavements* (pp. 123–129). Thessaloniki, Greece: CRC Press.
- 60. <u>Loganathan, K.\*</u>, Isied, M.\*, Coca, A., **Souliman, M.**, Romanoschi, S., & Dessouky, S. (2019). Mechanistic Empirical Estimation of Remaining Service Life of Flexible Pavements Based on Simple Deflection Parameters: A Case Study for the State of Texas. In *ASCE Airfield and Highway Pavements 2019 Conference* (pp. 294–305). Chicago, IL: American Society of Civil Engineers.
- 61. <u>Isied, M.\*</u> & **Souliman, M.** (2019). Fatigue Endurance Limit Model Utilizing Artificial Neural Network for Asphalt Concrete Pavements. In *ASCE Airfield and Highway Pavements 2019 Conference* (pp. 42–50). Chicago, IL: American Society of Civil Engineers.
- 62. Khanal, A.\*, & Souliman, M. (2019). Factors affecting pavement smoothness (A Study of California's Pavements). In *American Society for Engineering Education* (ASEE) Gulf Southwest Conference 2019. Tyler, TX: American Society of Engineering Education.
- 63. <u>Loganathan, K.\*, Isied, M.\*</u>, Coca, A., **Souliman, M.**, Romanoschi, S., & Dessouky, S. (2019). Mechanistic Empirical Estimation of Remaining Service Life of Flexible Pavements Based on Simple Deflection Parameters. In *American Society for Engineering Education (ASEE) Gulf Southwest Conference 2019*. Tyler, TX: American Society of Engineering Education.

- 64. **Souliman, M.** (2019). City of Tyler Hub-and-Spoke Bicycle Lane Map Development: Utilizing the Improved Bicycle Lane Engineered Scoring System. In *East Texas Research Conference*. Tyler, TX: University of Texas at Tyler.
- 65. <u>Loganathan, K.\*, Isied, M.\*</u>, Coca, A., **Souliman, M.**, Romanoschi, S., & Dessouky, S. (2019). Development of Deflection Parameters to Evaluate the Structural Capacity of Flexible Pavements at the Network Level: Case Study for the State of Texas. In *Tran-SET 2019 Conference* (Vol. 271, p. 08003). San Antonio, TX: EDP Sciences.
- 66. <u>GC, H.\*</u>, & **Souliman, M.** (2019). Treated Versus Untreated Aggregate Bases For Flexible Pavements: A Comparative Case Study in Alabama, Arizona, Arkansas, and Texas. In *American Society for Engineering Education (ASEE) Gulf Southwest Conference 2019*. Tyler, TX: American Society of Engineering Education.
- 67. <u>Loganathan, K.\*, Isied, M.\*</u>, Coca, A., **Souliman, M.**, Romanoschi, S., & Dessouky, S. (2019). Development of Comprehensive Deflection Parameters to Evaluate the Structural Capacity of Flexible Pavements at The Network Level. In *American Society for Engineering Education (ASEE) Gulf Southwest Conference 2019*. Tyler, TX: American Society of Engineering Education.
- 68. <u>Oenning Fagundes, A.\*</u>, & **Souliman, M.** (2018). City of Tyler Hub-and-Spoke Bicycles Lane Network. In *The 53rd National Collegiate Honors Annual Conference*. Boston, MA.
- 69. <u>Gc, H.\*</u>, **Souliman, M.**, Isied, M.\*, & Walubita, L. (2019). Treated Versus Untreated Aggregate Bases For Flexible Pavements: A Comparative Case Study in Alabama, Arizona, Arkansas, and Texas. In *Transportation Research Board 98th Annual Meeting*. Washington, D.C.: Transportation Research Board.
- 70. <u>Loganathan, K.\*, Isied, M.\*</u>, Coca, A., **Souliman, M.**, Romanoschi, S., & Dessouky, S. (2019). Mechanistic Empirical Estimation of Remaining Service Life of Flexible Pavements Based on Simple Deflection Parameters. In *Transportation Research Board 98th Annual Meeting*. Washington, D.C.: Transportation Research Board.
- 71. <u>Loganathan, K.\*, Isied, M.\*</u>, Coca, A., **Souliman, M.**, Romanoschi, S., & Dessouky, S. (2019). The Development of Comprehensive Deflection Parameters to Evaluate the Structural Capacity of Flexible Pavements at the Network Level. In *Transportation Research Board 98th Annual Meeting*. Washington, D.C.: Transportation Research Board.
- 72. <u>Isied, M.\*</u>, & **Souliman, M.** (2019). Artificial Neural Network Fatigue Endurance Limit Predictive Model for Asphalt Concrete Pavements Based on the Volumetric Properties. In *Transportation Research Board 98th Annual Meeting*. Washington, D.C.: Transportation Research Board.
- 73. <u>Loganathan, K.\*</u>, **Souliman, M.I.**, <u>Isied, M.\*</u>, "Simplified Approach for Structural Evaluation of Flexible Pavements at the Network Level", Transportation Consortium of South Central States (Tran-SET) Conference, New Orleans, LA, 2018.
- 74. <u>Loganathan, K.\*</u>, **Souliman, M.I.**, "Prediction of Average Annual Surface Temperature for both Flexible and Rigid Pavements", 2018 ASEE Gulf-Southwest Section Annual Meeting, Austin, TX, 2018.
- 75. <u>Zavagna</u>, P.\*, **Souliman**, M. "Engineered Scoring System for Bicycle Lane Mapping Development" 2018 ASEE Gulf-Southwest Section Annual Conference.
- 76. <u>Gc., H.\*</u>, **Souliman, M.** "Mechanistic Assessment of Fatigue Performance and Cost Analysis of Pavement Overlays" 2018 ASEE Gulf-Southwest Section Annual Meeting, Austin, TX, 2018

- 77. **Souliman, M.** "Implementation of a Hybrid Teaching Environment for a Traffic Engineering Course" 2018 ASEE Gulf-Southwest Section Annual Meeting, Austin, TX, 2018
- 78. <u>Loganathan, K.\*</u>, **Souliman, M.I.**, Chamoun, Z., Isied, M. M., "Design and Cost Effectiveness of Perpetual Pavements", Advances in Materials and Pavement Performance Prediction, Qatar, 2018.
- 79. <u>Tripathi, A.\*</u>, **Souliman. M.I.**, "Mechanistic Analysis and Economic Benefits of Fiber-Reinforced Asphalt Mixtures", Transportation Research Board Annual Meeting, January 2018.
- 80. <u>Tripathi A.\*</u>, **Souliman. M.I.**, Walubita. L. F., "Performance Evaluation of Jointed Plain Concrete Pavement with Sealed and Unsealed Joints in North Texas", Transportation Research Board Annual Meeting, January 2018.
- 81. Walubita, L., Hu, X., Nyamuhokya, T., Komba, J., **Souliman, M.**, Naik, B. "Geogrid Reinforcement in Hot-Mix Asphalt Interlayer Shear Bond Strength Assessment" Transportation Research Board Annual Meeting, January 2018.
- 82. <u>Tripathi, A.\*</u>, **Souliman. M.I.**, "Mechanistic Analysis and Economic Benefits of Fiber-Reinforced Asphalt Mixtures", Colombian Engineering Symposium, 2018.
- 83. <u>Zavagna, P.\*</u>, **Souliman, M.**, Aragão, F. "Effectiveness of Rehabilitation Options on Roughness Using LTPP Pavement Section Data for Arizona" International Society for Asphalt Pavements Conference, Fortaleza-Ceara, Brazil, June 2018
- 84. <u>Isied, M.\*</u>, <u>Sharma, P.\*</u>, **Souliman, M**. "Temperature Prediction Model at Different Depths for Asphalt Pavements Based on Measured Surface and Air Temperatures" Third Annual LSUS Regional Student Scholars Forum, Shreveport, LA. March 2018.
- 85. **Souliman, M.**, <u>Suryanarayanan, P.\*</u>, <u>Gc, H.\*</u> "Asphalt Rubber Experiences In Texas" Rubberized Asphalt Rubber Conference, Skukuza, South Africa, September 2018.
- 86. **Souliman, M.**, <u>Gc, H.\*</u>, Walubita, L. "Mechanistic Fatigue Analysis and Cost-Effectiveness Evaluation of Asphalt Rubber Mixtures" Rubberized Asphalt Rubber Conference, Skukuza, South Africa, September 2018.
- 87. **Souliman, M.**, <u>Strunk, C.\*</u>, Walubita, L. "Predicting Subgrade Resilient Modulus for use in the MEPDG using Common Soil Indices" 5th GeoChina International Conference, HangZhou, China, July 2018.
- 88. Lolly, R., Zeiada, W., **Souliman, M**., Kaloush, K. "Effects of Short-Term Aging on Asphalt Binders and Hot Mix Asphalt at Elevated Temperatures and Extended Aging Time" International Conference on Advances in Sustainable Construction Materials & Civil Engineering Systems (ASCMCES-17) Sharjah, United Arab Emirates, April 18 20, 2017.
- 89. **Souliman, M**., Zeiada, W., Walubita, L. "*Mechanical and Economical Impacts of Adding Polymers into Asphalt Mixtures*" International Conference on Advances in Sustainable Construction Materials & Civil Engineering Systems (ASCMCES-17) Sharjah, United Arab Emirates, April 18 20, 2017.
- 90. **Souliman, M**., Abd El-Hakim, R., <u>Davis, M.\*</u>, Walubita, L. "*Quantifying the Mechanistic and Economic Impacts of using Asphalt Rubber Mixtures*" GeoMEast International Conference, Sharm El-Sheikh, Egypt, pp. 16-26, 15-19 July 2017.
- 91. Zhang, J., Simate, G., Hu, X., **Souliman, M**., Walubita, L. "*Impact of Recycled Asphalt Materials on Asphalt Binder Properties and Rutting and Cracking Performance of Plant-Produced Mixtures*" Transportation Research Board 96th Annual Meeting, Washington, D.C. January 2017.

- 92. **Souliman, M.I.**, Eifert, A.\*, "Impact of Added Rubber on the Mechanical, Mechanistic, and Economical Attributes Of Asphaltic Mixtures" Rubberized Asphalt Rubber International Conference, Las Vegas, NV. October 2015.
- 93. **Souliman, M.I.**, Mamlouk, M., Kaloush, K., "*Endurance Limit for Asphalt Rubber Mixtures*" Rubberized Asphalt Rubber International Conference, Las Vegas, NV., October 2015
- 94. Mamlouk, M. S., and **Souliman, M. I.**, "Reducing Inconsistency of Hot-Mix Asphalt Flexure Fatigue Testing" Transportation Research Board, Washington, D.C., January 2015.
- 95. Hajj, E., Sebaaly, P., Piratheepan, M., and **Souliman, M. I.,** "*Laboratory, Field, and Economic Evaluation of Selected WMA Technologies*" Transportation Research Board, Washington, D.C., January 2015.
- 96. **Souliman, M. I.**, Mamlouk, M., "Fatigue Endurance Limit and Designing Perpetual Asphalt Pavements" International Conference on Perpetual Pavement, Columbus, Ohio, October 30-31, 2014.
- 97. Zeiada, W. A., **Souliman, M. I.**, Mamlouk, M. S., and Kaloush, K. E., "Endurance Limit for HMA Based on Healing-Damage Balance Criterion Using Viscoelastic Continuum Damage Analysis" Transportation Research Board, Washington, D.C., January 2013.
- 98. Hajj, E. Y., **Souliman, M. I.**, Cortez, E. M., Jorda, E., "Influence of Cecabase on the Mechanistic, Economical, and Environmental Attributes of a Polymer-modified Asphalt Mixture" Transportation Research Board, Washington, DC, January 2013.
- 99. Mamlouk, M. S., **Souliman, M. I.**, and Zeiada, W. A., "Optimum Testing Conditions to Measure HMA Fatigue and Healing Using Flexural Bending Test", Transportation Research Board, Washington, D.C., January 2012.
- 100. Kaloush, K. E., **Souliman, M. I.**, Zeiada, W. A., and Stempihar, J. J., "Sensitivity of Mixture Performance Tests to Identical PG Binders from Different Suppliers", Transportation Research Board, Washington, DC, January 2012.
- 101. **Souliman, M. I.**, Zeiada, W. A., Kaloush, K. E., and Mamlouk, M. S., "Assessment of Different Fatigue Failure Criteria to Estimate Number of Cycles to Failure", 3rd Four-Point Bending Beam Conference and Workshop. Davis, CA, pp. 27-34, September 2012.
- 102. Kaloush, K. E., Zeiada, W. A., **Souliman, M. I.**, Stempihar, J. J., Manzouri, T. P., "*Pavements and the Urban Heat Island Effect*", 3<sup>rd</sup> IRF Middle East Regional Congress & Exhibition, Kingdom of Bahrain, January 2012.
- 103. Zeiada, W. A., **Souliman, M. I.**, Stempihar, J., Biligiri, K. P., Kaloush, K. E., Said, S., and Hakim, H. "*Fatigue Resistance And Crack Propagation Evaluation of Asphalt Rubber Gap Graded Mixture in Sweden*", 7<sup>th</sup> Rilem International Conference on Cracking in Pavements, Volume 4, pp. 751-760, 2012.
- 104. Kaloush, K. E., Stempihar, J. J., **Souliman, M. I.**, Biligiri, K. P., Way, G., Belshe, M., "Laboratory Performance Evaluation of a Gap-Graded Asphalt Rubber Mixture in Puerto Rico", Asphalt Rubber Conference, Munich, Germany, October 2012.
- 105. Kaloush, K. E., Biligiri, K. P., Nordgren, T., Zeiada, W. A., Rodezno, M. C., **Souliman, M. I.**, Reed, J. X., and Stempihar, J. J., "Laboratory Evaluation of Asphalt-Rubber Gap Graded Mixture Constructed on Stockholm Highway in Sweden", Asphalt Rubber Conference 2012.

- 106. **Souliman, M. I.**, and Kaloush, K. E., "Local Calibration of the International Roughness Index AASHTO MEPDG Model", 5<sup>th</sup> International Conference Bituminous Mixtures and Pavements, Thessaloniki, Greece, June 1-3, 2011.
- 107. **Souliman, M. I.**, Mamlouk, M. S., El-Basyouny, M., and Zapata, C. E., "Calibration of the AASHTO MEPDG for Flexible Pavements for Arizona Conditions", Transportation Research Board, Washington, D.C., January 2010.
- 108. Kaloush, K. E., Nordgren, T., Biligiri, K. P., Zeiada, W. A., Rodezno, M. C., **Souliman, M. I.**, "Laboratory Evaluation Of Asphalt Rubber Gap Graded Mixture In Sweden", Asphalt Rubber Conference, Nanjing, China, November 2009.

### **IV.** Presentations/ Posters

- 1. Acharjee, P.\*, Souliman, M., Freya, F., Fuentes, L., "Artificial Neural Network-Based Dynamic Modulus Prediction Models for Colombian Mixtures Similar to Witczak and Hirsch Models" TexITE Spring Meeting, Lubbock, TX, April 12-14, 2023.
- 2. <u>Lama, P.\*</u>, Souliman, M., "Prediction of International Roughness Index of Flexible Pavement using Artificial Neural Network Modeling" TexITE Spring Meeting, Lubbock, TX, April 12-14, 2023.
- 3. <u>Khalifah, R.\*</u>, Souliman, M., "Developing a model to predict bleeding areas in asphalt pavements using an Artificial Neural Network" TexITE Spring Meeting, Lubbock, TX, April 12-14, 2023.
- 4. <u>Mutyala, P.\*</u>, Souliman, M., "Prediction of Faulting in Rigid Pavements by Using Artificial Neural Network" the Lyceum: student research showcase at UT Tyler, April 2023.
- 5. Mohammed, Z.\*, Souliman, M., "Study of LTPP Data for Wet-Freeze Climatic Regions for IRI using Artificial Neural Networking (ANN)" the Lyceum: student research showcase at UT Tyler, April 2023.
- 6. <u>Manoharan, P.\*</u>, Souliman, M., "Development of Predicting Model Using Artificial Neural Network to Predict Transverse cracking length in Wet and Dry No Freeze Climatic Regions" the Lyceum: student research showcase at UT Tyler, April 2023.
- 7. <u>Bajusair, M.\*</u>, Souliman, M., "Development of Machine Learning Model to Predict Alligator Cracking in Asphalt Pavements" the Lyceum: student research showcase at UT Tyler, April 2023.
- 8. <u>Ahmed, A.\*</u>, Souliman, M., "Increase in Roughness Due to Environmental Factors in Rigid Pavements" the Lyceum: student research showcase at UT Tyler, April 2023.
- 9. <u>Stewart, B.\*</u>, Souliman, M., "A Comparative Analysis of Maintenance and Rehabilitation Techniques for Existing Asphalt Pavement Sections" the Lyceum: student research showcase at UT Tyler, April 2022.
- 10. <u>Proffer, L.\*</u>, Souliman, M., "As-Constructed Air Voids and Asphalt Pavement Performance in Texas" the Lyceum: student research showcase at UT Tyler, April 2022.
- 11. <u>Mutyala, P.\*</u>, Souliman, M., "Quantifying the Influence of Pavement Performance with use of Geo-Synthetics" the Lyceum: student research showcase at UT Tyler, April 2022.

<sup>\*</sup> Published work with a UT Tyler student

- 12. <u>Manoharan, P.\*</u>, Souliman, M., "Predicting Roughness and Transverse Joint Spalling Model for PCC Pavement in the State of Texas using Artificial Neural Network" the Lyceum: student research showcase at UT Tyler, April 2022.
- 13. <u>Khalifah, R.\*</u>, Souliman, M., "Predicting Subgrade Resilience Modulus and The Soil Water Characteristic Curve Coefficients Using Artificial Neural Network Model (ANN)" the Lyceum: student research showcase at UT Tyler, April 2022.
- 14. <u>Bajusair</u>, M.\*, Souliman, M., "Development of Prediction model for Rutting Depth Using Artificial Neural Network" the Lyceum: student research showcase at UT Tyler, April 2022.
- 15. <u>Acharjee, P.\*</u>, Souliman, M., "Pavement Roughness Prediction Model for Texas with Artificial Neural Network" the Lyceum: student research showcase at UT Tyler, April 2022.
- 16. <u>Bast, S.\*, Stephens, D.\*, Mohammed, M.\*</u>, Souliman, M., Vechione, M., Shirvaikar, M., and Li, Y. "SMARTP3M: Smart Pavement Monitoring, Management, and Maintenance" the Lyceum: student research showcase at UT Tyler, April 2021.
- 17. <u>Dare, Z.\*</u>, Souliman, M., "Pavement Analysis and Rehabilitation Strategies on University Roads" the Lyceum: student research showcase at UT Tyler, April 2021.
- 18. <u>Honea, N.\*</u>, Souliman, M., "Pavement Analysis of Varsity Drive" the Lyceum: student research showcase at UT Tyler, April 2021.
- 19. <u>Levels, J.\*</u>, Souliman, M., "Road Rehabilitation" the Lyceum: student research showcase at UT Tyler, April 2021.
- 20. <u>Mendiola, S.\*</u>, Souliman, M., "Pavement Study" the Lyceum: student research showcase at UT Tyler, April 2021.
- 21. <u>Muhire, A.\*</u>, Souliman, M., "Pavement Distress Evaluation" the Lyceum: student research showcase at UT Tyler, April 2021.
- 22. <u>Tinsley</u>, J.\*, Souliman, M., "Pavement Review: Old Omen Rd From University Blvd to Liberty Landing Apartments" the Lyceum: student research showcase at UT Tyler, April 2021.
- 23. <u>Williams, J.\*</u>, Souliman, M., "Pavement Distresses and Rehabilitation for Circle Drive" the Lyceum: student research showcase at UT Tyler, April 2021.
- 24. <u>Cui, L.\*</u>, Souliman, M., "Effect of Warm Mix Asphalt on Pavement Performance" the Lyceum: student research showcase at UT Tyler, April 2021.
- 25. <u>Enciso, Z.\*</u>, Souliman, M., "Influence of Traffic Loading on Transverse Cracking on Asphalt Concrete Pavement under Wet-Freeze Areas" the Lyceum: student research showcase at UT Tyler, April 2021.
- 26. <u>Karki, S.\*</u>, Souliman, M., "Artificial Neural Network Model to predict the Fatigue Endurance limit for Asphalt Concrete Pavement" the Lyceum: student research showcase at UT Tyler, April 2021.
- 27. <u>Mohammed, Z.\*</u>, Souliman, M., "Development of prediction model for IRI utilizing traditional Regression analysis and Artificial Neural Network" the Lyceum: student research showcase at UT Tyler, April 2021.
- 28. <u>Moinuddin, M.\*</u>, Souliman, M., "Development of Deep Learning based model to predict Dynamic Modulus in Matlab using Artificial Neural Networks (ANN)" the Lyceum: student research showcase at UT Tyler, April 2021.
- 29. Morris, V.\*, Souliman, M., "Increase in Roughness due to Environmental Factors in Flexible Pavements" the Lyceum: student research showcase at UT Tyler, April 2021.

- 30. <u>Ali, S.\*</u>, Souliman, M., "Factors Affecting Load Transfer Efficiency on Rigid Pavements" the Lyceum: student research showcase at UT Tyler, April 2021.
- 31. <u>Bast, S.\*, Stephens, D.\*, Mohammed, M.\*</u>, Souliman, M., Vechione, M., Shirvaikar, M., and Li, Y. "SMARTP3M: Smart Pavement Monitoring, Management, and Maintenance" Great Plains Honors Council Conference. March 2021.
- 32. <u>Bastola, N.\*</u>, **Souliman, M.**, "Rutting Performance of Pavement under Autonomous Vehicle Consideration" the Lyceum: student research showcase at UT Tyler, April 2020.
- 33. <u>Reddy Yarrapureddi, H.\*</u>, **Souliman, M.**, "Develop an Empirical Model to Predict Reflection Cracking in Asphalt Overlay Pavements for the State of Texas" the Lyceum: student research showcase at UT Tyler, April 2020.
- 34. <u>Sheraze</u>, A.\*, **Souliman**, M., "Optimization of Tack Coat for HMA Placement" the Lyceum: student research showcase at UT Tyler, April 2019.
- 35. <u>Bastola, N.\*</u>, **Souliman, M.**, "Change in Resilient Modulus of Base Layers in Asphalt Pavement Structurest" the Lyceum: student research showcase at UT Tyler, April 2019.
- 36. <u>Gonzalez Del Valle, N.\*</u>, **Souliman, M.**, "Predicting Reflective Cracking in Hot Mix Asphalt Overlays" the Lyceum: student research showcase at UT Tyler, April 2019.
- 37. <u>Fagundes</u>, A.\*, <u>Morales-Alvarez</u>, G.\*, **Souliman**, M., "An Update on the City of Tyler Hub-and-Spoke Bicycle Lane" the Lyceum: student research showcase at UT Tyler, April 2019.
- 38. <u>Pearson, A.\*</u>, **Souliman, M.**, "Mechanistic Analysis of the Effect of Asphalt Binder Grades on Pavement Design Life" the Lyceum: student research showcase at UT Tyler, April 2019.
- 39. <u>Reddy Yarrapureddi, H.\*</u>, **Souliman, M**., "Development of an Empirical Model to Predict Longitudinal Cracking in Asphalt Pavements" the Lyceum: student research showcase at UT Tyler, April 2019.
- 40. <u>Davis</u>, J.\*, **Souliman**, M., "Estimation of Key Portland Cement Concrete Engineering Properties and Physical Characteristics" the Lyceum: student research showcase at UT Tyler, April 2019.
- 41. <u>Alvarez, G.\*</u>, **Souliman, M.** "City of Tyler Hub-and-Spoke Bicycle Lane Network" NSF-Louis Stokes Alliance for Minority Participation (LSAMP) Student Research showcase, University of Texas at El-Paso, May 2019.
- 42. <u>Sheraze, A.\*</u>, **Souliman, M**., "Quality Pavement Temperature Data for Pavement Transportation Analysis and Design" the Lyceum: student research showcase at UT Tyler, April 2018.
- 43. <u>Gc, H.\*</u>, **Souliman, M.**, "Calibration of Fatigue Cracking model in MEPDG for flexible pavements in Texas" the Lyceum: student research showcase at UT Tyler, April 2018.
- 44. <u>Gomez Santana, L.\*</u>, **Souliman, M.**, "Calculating truck factors for pavement design from WIM traffic data" the Lyceum: student research showcase at UT Tyler, April 2018.
- 45. <u>Isied, M.\*</u>, **Souliman, M.**, "Prediction Model for Subgrade Soil Resilient Dynamic Modulus Utilizing Basic Soil Characteristics for the State of Louisiana" the Lyceum: student research showcase at UT Tyler, April 2018.

- 46. Weaver, C.\*, Souliman, M., "Common Characteristics Of Good And Poorly Performing Asphalt Concrete Pavements" the Lyceum: student research showcase at UT Tyler, April 2018.
- 47. <u>Gonzalez Del Valle, N.\*</u>, **Souliman, M.**, "Influence of Design and Construction Features on the Response and Performance of New Flexible Pavements" the Lyceum: student research showcase at UT Tyler, April 2018.
- 48. Khanal, A.\*, **Souliman, M**., "Factors affecting pavement smoothness: A Study of California's Pavements" the Lyceum: student research showcase at UT Tyler, April 2018. *Poster session Crowd Favorite*
- 49. <u>Loganathan, K.\*, Isied, M.\*, Souliman, M.</u>, Romanoschi, S., Dessouky, S., "Simplified Approach for Structural Evaluation of Flexible Pavements at the Network Level" the Lyceum: student research showcase at UT Tyler, April 2018.
- Tripathi, A.\*, Souliman, M., "Mechanistic Analysis and Economic Benefits of Fiber-Reinforced Asphalt Mixtures" the Lyceum: student research showcase at UT Tyler, April 2018.
- 51. <u>Zavagna, P.\*</u>, **Souliman, M**., "City of Tyler Hub-and-Spoke Bicycle Lane Network" the Lyceum: student research showcase at UT Tyler, April 2018. <u>Ist Place winning poster</u>
- 52. <u>Sharma, P.\*</u>, **Souliman, M.**, "Temperature Prediction Model at Different Depths for Asphalt Pavements Based on Measured Surface and Air Temperatures" the Lyceum: student research showcase at UT Tyler, April 2018.
- 53. <u>Alvarez, G.\*</u>, **Souliman, M.** "Hub-and-Spoke Tyler Bike Lane Project" NSF-Louis Stokes Alliance for Minority Participation (LSAMP) Student Research showcase, University of Texas at El-Paso, September 2017.
- 54. <u>Zavagna, P.\*</u>, **Souliman, M.**, "Effectiveness of Rehabilitation Options on Roughness Using LTPP Section Data for the State of Texas" the Lyceum: student research showcase at UT Tyler, April 2017.
- 55. <u>Tripathi, A.\*</u>, **Souliman, M.**, "Relative Performance of Jointed Plain Concrete Pavement with Sealed and Unsealed Joints" the Lyceum: student research showcase at UT Tyler, April 2017.
- 56. <u>Loganathan, K.\*</u>, Souliman, M., "Cost comparison between normal asphalt and admixed asphalt pavements" the Lyceum: student research showcase at UT Tyler, April 2017.
- 57. <u>Gc, H.\*</u>, Souliman, M., "Assessment of Extended Fatigue Life and Cost Effectiveness of HMA, Asphalt Rubber and Polymer Overlay on Preexisting HMA Pavement" the Lyceum: student research showcase at UT Tyler, April 2017.
- 58. <u>Suryanarayanan, P.\*</u>, **Souliman, M**., "Scrap Tires: Environment Problem or Solution?" the Lyceum: student research showcase at UT Tyler, April 2017
- 59. **Souliman, M. I.**, <u>Zavagna, P.\*</u> "Hub-and-Spoke Tyler Bike Lane Project" Undergraduate Research Day at the Capitol, Austin, TX, March 2017.
- 60. <u>Zavagna, P.\*</u>, **Souliman, M.**, "Hub-and-Spoke Tyler Bike Lane Study" the Lyceum: student research showcase at UT Tyler, April 2016. <u>1st Place winning poster</u>
- 61. <u>Shankar, K.\*</u>, **Souliman, M**., "Effectiveness of Rehabilitation Options on Roughness Using LTPP Section Data for New Mexico" the Lyceum: student research showcase at UT Tyler, April 2016.
- 62. <u>Davis, M.\*</u>, **Souliman, M**., "Asphalt Rubber Mixtures in Pavement Construction and Design" the Lyceum: student research showcase at UT Tyler, April 2016.

- 63. Woldu, B.\*, Souliman, M., "Comparative Study of Different Pavement Design Techniques" the Lyceum: student research showcase at UT Tyler, April 2016.
- 64. **Souliman, M. I.**, <u>Zavagna, P.\*</u> "Hub-and-Spoke Tyler Bike Lane Study" Greater Tyler Association of Realtors, Tyler, TX, November 2016.
- 65. **Souliman, M. I.**, <u>Zavagna, P.\*</u> "Hub-and-Spoke Tyler Bike Lane Project" Tyler Chamber of Commerce, Tyler, TX, October 2016.
- 66. **Souliman, M. I.**, "Hub-and-Spoke Tyler Bike Lane study" Tyler Chamber Surface Transportation Committee lunch and learn meeting, Tyler, TX, July 2015.
- 67. **Souliman, M. I.**, "Integrated Predictive Model for Healing and Fatigue Endurance Limit for Asphalt Concrete" Recent Advancements in Mechanistic Evaluations of Flexible Pavements-Workshop 864, Transportation Research Board, Washington, D.C., January 2015.
- 68. **Souliman, M. I.**, "Integrated Fatigue Endurance Limit For Asphalt Mixtures Based on Healing", Center for Transportation Infrastructure Systems Institute of Transportation Engineers Seminar, University of Texas at El Paso, El Paso, TX, February 23, 2015 (Invited talk / Presentation)
- 69. **Souliman, M. I.**, Hajj, E. Y., and Sebaaly, "Evaluation of WMA Concrete Pavement in South Dakota Conditions", Warm Mix Asphalt in the Dakota's Open house, Mitchell, SD, October, 2012.
- 70. **Souliman, M. I.**, "Integrated Predictive Model for Healing and Fatigue Endurance Limit for Sustainable Asphalt Concrete", Institute of Transportation Engineers Seminar, Arizona State University, Tempe, AZ, November 29, 2011, <a href="http://asuite.weebly.com/seminar-by-mena-souliman.html">http://asuite.weebly.com/seminar-by-mena-souliman.html</a>.
- 71. **Souliman, M. I.**, "Fatigue Cracking for Hot Mix Asphalt", Arizona State University, Bituminous Materials and Mixtures Graduate Class, Tempe, AZ, October 4, 2011 (Invited talk / Presentation).
- 72. **Souliman, M. I.**, "Four-Point Bending Beam Fatigue Analysis", Arizona State University, Bituminous Materials and Mixtures Graduate Class, Tempe, AZ, October 11, 2011 (Invited talk / Presentation).
- 73. Stempihar, J. J., and **Souliman, M. I.**, "Laboratory Evaluation of the 2009 Pr-10 Pilot Asphalt Rubber Project in Puerto Rico", Arizona State University, TAB meeting, Tempe, AZ, April 28, 2011 (Invited talk / Presentation).
- 74. **Souliman, M. I.**, "MCDOT Local MEPDG implementation", Arizona State University, Sustainable Engineering and the Built Environment Department Student Poster Competition, Tempe, AZ, March, 2011 (Poster Presentation).
- 75. Mamlouk, M. S., **Souliman, M. I.**, Zeiada, W. A., and Kaloush, K. E., "Healing of Asphalt Mixtures", Arizona Pavements/Materials Conference, Tempe, AZ, November 15-16, 2011. (Poster Presentation).
- 76. Stempihar, J. J., **Souliman, M. I.**, and Kaloush, K. E., "Fiber Reinforced Asphalt Mixtures for Airfields", Arizona Pavements/Materials Conference, Tempe, AZ, November 15-16, 2011. (Poster Presentation).
- 77. **Souliman, M. I.**, Mamlouk, M. S., Zapata, C. E., and Cary, C. E., "Implementation Of The MEPDG For MCDOT", Arizona Pavements/Materials Conference, Tempe, AZ, November 15-16, 2011. (Poster Presentation).

## V. Research Project Reports

<sup>\*</sup> Published work with a UT Tyler student

- 1. Wilson, B., **Souliman, M**., Lama, P., Goehl, D. "Develop Recommendations for Evaluating Surface Types and Aggregate Properties to Minimize Wet Weather Crashes, Texas Department of Transportation, p. 52. 2023.
- 2. Sheng, H., Zhou, F., Scullion, T., Fernando, E., **Souliman, M.** "Develop Surface Aggregate Classification of Reclaimed Asphalt Pavement: Technical Report". Texas Department of Transportation, p. 198. 2022.
- 3. **Souliman, M.**, Dessouky, S., Bastola, N. "Expanding the Concept of Comprehensive Area Ratio Parameter to the South-Central States: Towards Simplifying the Structural Evaluation of Flexible Pavements at the Network Level". US Department of Transporation, p. 223. 2021.
- 4. Walubita, L., **Souliman, M**. "Project 6959: Documenting the Impact of Aggregate Quality on Hot Mix Asphalt (HMA) Performance" Final Report, Texas Department of Transportation. October 2019.
- 5. Romanoschi, S., **Souliman, M.**, Dessouky, S. "Simplified Approach for Structural Evaluation of Flexible Pavements at the Network Level" Final Report, US Department of Transportation-Tran-SET, p. 178. May 2018.
- 6. Romanoschi, S., **Souliman, M.**, Dessouky, S. "Simplified Approach for Structural Evaluation of Flexible Pavements at the Network Level" Interim Report 1, US Department of Transportation-Tran-SET, p. 43. August 2017.
- 7. Romanoschi, S., **Souliman, M.**, Dessouky, S. "Simplified Approach for Structural Evaluation of Flexible Pavements at the Network Level" Interim Report 2, US Department of Transportation-Tran-SET, p. 138. November 2017.
- 8. Romanoschi, S., **Souliman, M.**, Dessouky, S. "Simplified Approach for Structural Evaluation of Flexible Pavements at the Network Level" Interim Report 3, US Department of Transportation-Tran-SET, p. 19. February 2018.
- 9. Walubita, L., **Souliman, M**. "Project 6959: Documenting the Impact of Aggregate Quality on Hot Mix Asphalt (HMA) Performance" Task Report#1, Texas Department of Transportation, p. 12. October 2017.
- 10. Walubita, L., **Souliman, M**. "Project 6959: Documenting the Impact of Aggregate Quality on Hot Mix Asphalt (HMA) Performance" Task Report#2, Texas Department of Transportation, p. 18. January 2018.
- 11. **Souliman, M.** and Tripathi, A. "Mechanistic and Economic Benefits of Fiber-Reinforced Asphalt Mixtures". Final Report, Forta Corporation, p. 28. 2017.
- 12. **Souliman, M.** and Zavagna, P. "*Hub-and-Spoke Tyler Bike Lane Study*". Final Report, East Texas Communities Foundation, p. 77. 2017.
- 13. Sebaaly, P. E., Hajj, E. Y., **Souliman, M.** "Evaluation of Warm Mix Asphalt Concrete Pavement in South Dakota Conditions". Final Report, South Dakota DOT, p. 218. 2015.
- 14. Sebaaly, P. E., Schlierkamp, R., Diaz, C., Hajj, E. Y., **Souliman, M.** "Develop a PWL System for Dense Graded Hot Mix Asphalt Construction Including Pay Factors". Final Report, Nevada DOT, p. 49. 2014.
- 15. **Souliman, M. I.**, Hajj, E. Y., Sebaaly, P. E., Nabhan, P. "*Implementation of Pavement-ME for Nevada's Conditions*". Final Interim Report, Nevada DOT, p. 184. 2013
- 16. Witczak, M., Mamlouk, M., **Souliman, M. I**., Zeiada, W., "*Laboratory Validation of an Endurance Limit for Asphalt Pavements*" National Cooperative Highway Research Program, NCHRP report No. 762. Washington, D.C., 2013.

- 17. Hajj, E.Y., Cortez, E., Sebaaly, P., Morian, M., **Souliman, M.I.**, "Study of Pavement Temperature Rates in Hot Mix Asphalt Layers" Interim Report submitted to Federal Highway Administration, Washington. D.C., September, 2013.
- 18. **Souliman, M. I.**, Hajj, E. Y., Suwal, R., Sebaaly, P. E., "*Task A-2: Evaluation of the Pavement Rating System for Flexible Pavements*" Interim Report submitted to Nevada Department of Transportation, NV, February 2013.
- 19. **Souliman, M. I.**, Hajj, E. Y., Sebaaly, P. E., "*Trip Report for Highway 262 WMA Project Hanson and McCook Counties, South Dakota*" Final Report submitted to South Dakota Department of Transportation, SD, December 2012.
- 20. **Souliman, M**., Hajj, E. Y., Sebaaly, P. E.. "Effectiveness of Single and Sequential Applications of Slurry Seals on Asphalt Pavements in the Truckee Meadows Region". Final Report, Washoe Regional Transportation Commission, p. 34. 2012.
- 21. Hajj, E. Y., Cortez, E. M., **Souliman, M. I.**, "Evaluation of the CECABASE<sup>TM</sup> RT Warm-Mix Additive" Final Report submitted to CECA Arkema Group, France, June 2012.
- 22. Kaloush, K. E., Biligiri, K. P., Zeiada, W. A., Rodezno, M. C., **Souliman, M. I.**, Reed, J. X., and Stempihar, J. J., "*Laboratory Evaluation of Rubber & Polymer Modified Bituminous Mixtures Constructed in Stockholm*" Final Report Submitted to Swedish Road Administration, Vägverket, 405 33 Göteborg, Kruthusgatan 17, Sweden, February 2010.
- 23. Kaloush, K. E., Biligiri, K. P., Zeiada, W. A., Rodezno, M. C., **Souliman, M. I.**, and Reed, J. X., "*Performance Evaluation of Asphalt Rubber Mixtures in Arizona Lake Havasu Project*" Submitted to Arizona Department of Transportation, Materials Group 1221 N 21<sup>st</sup> Ave Phoenix, AZ 85009, March 2009.
- 24. Witczak, M. W., Mamlouk, M. S., and **Souliman, M. I.**, "Development and Implementation of the Mechanistic Empirical Pavement Design Guide (M-E PDG) for Arizona-Summary of Properties of ADOT Conventional Mixes" Submitted to Arizona Department of Transportation, Phoenix, February, 2009.
- 25. Kaloush, K. E., Biligiri, K. P., Rodezno, M. C., Zeiada, W. A., **Souliman, M. I.**, and Reed, J. X., "*Performance Evaluation of Asphalt Rubber Mixtures in Arizona Palo Parado Project*" Submitted to Arizona Department of Transportation, Materials Group 1221 N 21<sup>st</sup> Ave Phoenix, AZ 85009, October 2009.
- 26. Kaloush, K. E., Biligiri, K. P., Zeiada, W. A., Rodezno, M. C., and **Souliman, M. I.**, "Laboratory Pavement Performance Evaluation of Swedish Gap Graded Asphalt Concrete Mixtures Malmo E-06 Highway", Final Report Submitted to Swedish Road Administration, Vägverket, 405 33 Göteborg, Kruthusgatan 17, Sweden, October 2008.
- 27. Mamlouk, M. S., Zapata, C. E., Witczak, M. W., Biligiri, K. P., Cary, C. E., Dwivedi, S., **Souliman, M. I.**, Zeiada, W. A., Lopez, N., and Barranco, B., "*Pavement Design Research towards the Implementation of the Mechanistic-Empirical Pavement Design Guide*", Second Year Summary Report Submitted to Maricopa County Department of Transportation, Phoenix, Arizona 85009, July 2008.

### VI. Graduate Student Advising

### University of Texas at Tyler

1. Rami Khalifah, Major advisor and final oral exam committee chair (December 2023)

- 2. Prashanta Acharjee, Major advisor and final oral exam committee chair (July 2023)
- 3. Sohil Paudel, Final oral exam committee (Spring 2021)
- 4. Lisa Cui, Spring 2021: Final oral exam committee
- 5. Alex Pearson, Fall 2020: Final oral exam committee
- 6. Nitish Bastola, Major advisor and final oral exam committee chair (December 2020)
- 7. Hari Kumar Yarrapureddi, Final oral exam committee (December 2020)
- 8. Norma Gonzalez, Spring 2020: Final oral exam committee
- 9. Aqil Sheraze, Spring 2020: Final oral exam committee
- 10. Joshua Davis, 2019: Final oral exam committee chair
- 11. Pedro Zavagna, Major advisor and final oral exam committee chair (Spring 2018)
- 12. Ashish Tripathi, Major advisor and final oral exam committee chair (Spring 2018)
- 13. Karthikeyan Loganathan, Major advisor and final oral exam committee chair (Spring 2018)
- 14. Clint Hoover, Spring 2018: Final oral exam committee
- 15. Mayzan Isied, Major advisor and final oral exam committee chair (Summer 2019)
- 16. Hemant Gc, Major advisor and final oral exam committee chair (December 2018)
- 17. Kumar Shankar, Spring 2016: Final oral exam committee
- 18. Priyanka Manjunatha, Summer 2015: Final oral exam committee
- 19. Shaun Spivey, Fall 2014: Major advisor and Final oral exam committee chair

## University of Nevada, Reno

- 1. Peter Nabhan, December 2014: MS committee
- 2. Roshan Suwal, Summer 2014: MS committee
- 3. Michael Michael, Fall 2013: MS committee

## VII. Undergraduate Student Advising

### University of Texas at Tyler

- 1. Gabriella Alvarez (May 2020)
- 2. Zachery Smolen (May 2020)
- 3. Arthur Fagundes (May 2019)
- 4. Pedro Zavagna (May 2016)

## VIII. Organizing Training Workshops

- 1. **Souliman, M. I.**, "Percent within Limits for Nevada Department of Transportation", University of Nevada, Reno, Nevada Department of Transportation PWL workshop, Reno, NV, February, 2014 (Invited talk / Presentation).
- 2. **Souliman, M. I.,** "Superpave Mix Design Lab Tests and Associated Mix Properties", University of Nevada, Reno, Superpave Performance Grade and Volumetric Mix Design workshop, Reno, NV, October 9, 2013 (Invited talk / Presentation).
- 3. **Souliman, M. I.**, "*Introduction to HMA Mix Design*", University of Nevada, Reno, Asphalt Binders Grading systems and HMA Mix Designs workshop, Reno, NV, March 21, 2013 (Invited talk / Presentation).
- 4. **Souliman, M. I.**, "Pavement Management systems", University of Nevada, Reno, Pavement Engineering and Green Technologies workshop, Reno, NV, March 20, 2013 (Invited talk / Presentation).

5. **Souliman, M. I.**, "Local Calibration of Pavement-ME for Nevada Conditions", University of Nevada, Reno, Nevada Department of Transportation Pavement-ME workshop, Reno, NV, March 20, 2013 (Invited talk / Presentation).

#### IX. Honors / Awards

- 1. Ronald Brazzel Endowed professor of Civil Engineering, 2021
- 2. President's scholarly achievement award, UT Tyler, 2021
- 3. College of Engineering Research and Scholarship Award, 2021
- 4. **Invited Keynote speaker** at the international Conference on Advanced Civil Engineering and Smart Structure in Xi' an, China on October 25-26, 2022
- 5. **Book editor** for the GeoChina Conference in 2021 that was published by Springer (https://link.springer.com/book/10.1007/978-3-030-80142-7)
- 6. **First Place** at the 2021 Lyceum Research Poster competition at UT Tyler, "Effect of Warm Mix Asphalt on Pavement Performance" with Lisa Cui, 2021.
- 7. Fellow of the UT Tyler Academy of Distinguished Teachers (ADT), 2022
- 8. **2<sup>nd</sup> Place** at the 2022 Lyceum Research Poster competition at UT Tyler, "Pavement Roughness Prediction Model For Texas With Artificial Neural Network (ANN)" with Prashanta Acharjee, 2022.
- 9. **2<sup>nd</sup> Place at the ASEE 2022 Conference** with Acharjee, P. "Acharjee, P., & **Souliman, M.** (2022). Development of Dynamic Modulus Predictive Model Using Artificial Neural Network (ANN). In American Society for Engineering Education (ASEE) Gulf Southwest Conference 2022. Prairie View, TX: American Society of Engineering Education."
- 10. Certificate of Professional Development, UT Tyler CETL, 2020
- 11. Certificate of Completion, Team-Based Learning Collaborative, 2019
- 12. The College of Engineering Teacher of the Year Award, 2018
- 13. Runner-up, The College of Engineering Research and Scholarship Award, 2018
- 14. Crystal Quill Award, Robert Muntz Library, UT Tyler, February 2018.
- 15. Who's Who in the World, 2018, 2020.
- 16. **First Place** at the 3<sup>rd</sup> Lyceum Research Poster competition at UT Tyler, "City of Tyler Hub-and-Spoke Bicycle Lane Network" with Pedro Zavagna, 2018.
- 17. **Poster Session Crowd Favorite** at the 3rd Lyceum Research Poster competition at UT Tyler, "Factors affecting pavement smoothness: A Study of California's Pavements" with Alisha Khanal, 2018.
- 18. **First Place** at the 2019 Lyceum Research Poster competition at UT Tyler, "City of Tyler Hub-and-Spoke Bicycle Lane Network" with Gabriella Morales Alvarez and Arthur Oenning Fagundes, 2019.
- 19. Crystal Talon Award, Robert Muntz Library, UT Tyler, February 2017.
- 20. **Outstanding Faculty Mentor Award**, 2nd Annual Lycum Undergradtae/graduate Research Showcase, UT Tyler, April 2017.
- 21. **First place** at the 53rd National Collegiate Honors Annual Conference. Boston, MA "Oenning Fagundes, A.\*, & Souliman, M. (2018). City of Tyler Hub-and-Spoke Bicycles Lane Network. In The 53rd National Collegiate Honors Annual Conference. Boston, MA."
- 22. 2<sup>nd</sup> Place award from the Center for Excellence in Teaching and Learning for 2019-2020 Academic Year, UT Tyler.

- 23. 2<sup>nd</sup> Place at the ASCE Research Poster Competition with Gabriella Morales Gonzalez, Arlington, TX, March 2020
- 24. 5th Place at the ASEE 2019 Conference with Khanal, A. "Khanal, A., & Souliman, M. (2019). Factors affecting pavement smoothness (A Study of California's Pavements). In American Society for Engineering Education (ASEE) Gulf Southwest Conference 2019. Tyler, TX: American Society of Engineering Education."
- 25. Who's Who in the America, 2017.
- 26. NSF Panel Member for the Graduate Fellowship Program, 2017, 2018.
- 27. Certificate of Achievement, Robert Muntz Library, UT Tyler, February 2016.
- 28. First Place at the Lyceum Undergraduate Research Poster competition at UT Tyler, "Hub and Spoke City of Tyler Bike Lane" with Pedro Zavagna, 2016.
- 29. Civil and Environmental Graduate Study Incentive, Arizona State University, 2011.
- 30. Travel Grant to attend the following conferences and meetings:
  - 8th Rilem International Conference on Mechanisms of Cracking and Debonding in Pavements
  - Rubberized Asphalt Rubber, 2015
  - International Conference on perpetual Pavement, 2014
  - 5<sup>th</sup> International Conference of Bituminous Mixtures and Pavements, 2011.
  - Transportation Research Board Annual Conference, 2009-2018.
- 31. **Executive Fellow and Lifetime Member**, International Road Federation (IRF) Executive Leadership Program for 2009, awarded by the International Road Educational Foundation's (IREF), Madison Place, 500 Montgomery Street, Suite 525, Alexandria, Virginia 22314.
- 32. Graduate Research Associate, Teaching Assistant, Research Assistant (*January 2008-May 2012*), Department of Civil, Environmental, and Sustainable Engineering Program, Arizona State University.
- 33. Best Achiever Awards, Department of Civil Engineering, Hashemite University, Zarqa, Jordan, (2003, 2004, 2005, 2006, and 2007).

## X. Media Press Releases

- 1. Tyler Morning Telegraph "UT Tyler professor awarded TxDOT grant for project to improve roads for wet-weather driving" November 22, 2022
- 2. Asphalt Magazine "Asphalt Academic: Dr. Mena I. Souliman" Vol. 36, No. 1. Spring 2021
- 3. UT Tyler Office of Marketing and Communications "UT Tyler Professor to Study Rural Transportation" May 7th, 2020
- 4. KETK TV Interview "SPECIAL REPORT: How 'terrible' is Toll 49 really?" February 23rd, 2023
- 5. Construction Equipment Guide.com "University of Texas Professor Will Enhance Highway Asphalt" November 29, 2022
- 6. UT Tyler Office of Marketing and Communications "Tyler Resident Recognized at State Transportation Engineers Meeting" May 8th, 2023
- 7. KETK TV Interview "City of Tyler receives grant money for bike lane project" October 31st, 2017
- 8. KETK TV Interview "UT Tyler Engineering professor helps 'Tyler Bike Lane Project'" January 13th, 2017

- 9. KETK TV Interview "SPECIAL REPORT: Toll 49 troubles" February 25th, 2018
- 10. Tyler Morning Telegraph "Potential to Create Bike Lanes is Studied" Volume 87, Issue 332, November 27th, 2016
- 11. Longview News-Journal "Student represented UT Tyler at 'Undergraduate Research Day at the Capitol" April 5th, 2017
- 12. Lindale News and Times "UT Tyler students helping TxDOT develop future Texas highways" November 8th, 2017
- 13. One News Page "City of Tyler receives grant money for bike lane project" November 1st, 2017
- 14. youreasttexas.com "UT Tyler represented at Undergraduate Research Day at the Capitol" March 29th, 2017
- 15. Patriot Talon "The University of Texas at Tyler Provides Groundwork for TxDOT," November 7th, 2017
- 16. UT Tyler Office of Marketing and Communications "The University of Texas at Tyler Provides Groundwork for TxDOT," November 2nd, 2017
- 17. UT Tyler Office of Marketing and Communications "The University of Texas at Tyler Announces 'Crystal Talon' Award Recipients," March 6th, 2017
- 18. UT Tyler College of Engineering Dean's Message "Annual Report 2016-2017"
- 19. Tyler Morning Telegraph "Study to evaluate Tyler street's potential for bike lanes" 26 November 2016
- 20. Tyler Morning Telegraph "Bike lanes won't be added to Tyler streets for another four years, design being developed" 4 November 2017
- 21. UT Tyler Office of Marketing and Communications "Patriot Spotlight: UT Tyler Professor Involved in City of Tyler's Bike Lane Project" September 30th, 2016
- 22. UT Tyler Office of Marketing and Communications "The University of Texas at Tyler Paving Way with USDOT Program" June 27th, 2017
- 23. UT Tyler Office of Marketing and Communications "The University of Texas at Tyler Represented at 'Undergraduate Research Day at the Capitol" March 29th, 2017
- 24. UT Tyler Office of International Programs-Spring 2017 International Newsletter "University of Texas at Tyler Represented at 'Undergraduate Research Day at the Capitol'" Spring 2017

## **XI.** Professional Development

- 1. Attended and obtained a certificate of completion for "LCCA PaveXpress Update" offered by Asphalt Pavement Alliance, May 30<sup>th</sup>, 2018.
- 2. Attended and obtained a certificate of completion for "PaveXpress Version 3.0-New Linear Elastic and Costing Modules" offered by Asphalt Pavement Alliance, November 4<sup>th</sup>, 2016.
- 3. Attended and obtained a certificate of completion for "e-Construction in Practice: Digital Exchange with WSDOT & TxDOT" January 27<sup>th</sup>, 2016.
- 4. Attended and obtained a certificate of completion for "PavexPress Overlay Module User Training" offered by Asphalt Pavement Alliance, July 29<sup>th</sup>, 2015.
- 5. Attended and obtained a certificate of completion for "PavexPress simplified, Online Pavement Design Tool Webinar" offered by Asphalt Pavement Alliance, October 16<sup>th</sup>, 2014.

#### XII. Computing Skills

- 1. Operating Systems: Windows 95/98/NT/2000/XP/Vista/7/8/10/11
- 2. Packages: 3D-Move, PaveXPress, MS Office, MicroStation, InRoads, AutoCAD, Maple10, Mathematica, Statistica, Minitab, SAS-JMP, Mechanistic-Empirical Pavement Design Guide (MEPDG).

#### **TEACHING EXPERIENCE**

## I. Teaching Classes

## University of Texas at Tyler

(August 2014-Present)

### Fall 2014

ENGR 2301: Engineering Mechanics: Statics

CENG 4351/CENG5351: Traffic Engineering: Operations and Control (with Lab)

CENG 5393: Advanced Design Project

### <u>Spring 2015</u>

CENG 3351: Transportation Engineering

CENG 4350/5350: Advanced Topics in Civil Engineering: Pavement Management

Systems (first time offered at UT Tyler)

## **Summer 2015**

ENGR 2301: Engineering Mechanics: Statics

### Fall 2015

ENGR 1204: Engineering Graphics I (with Lab)

ENGR 2301: Engineering Mechanics: Statics

CENG 4351/CENG 5351: Traffic Engineering: Operations and Control (with Lab)

### Spring 2016

ENGR 1204: Engineering Graphics I (with Lab)

CENG 3351: Transportation Engineering

CENG 4353/CENG 5350: Introduction to Pavement Engineering (first time offered at

UT Tyler)

CENG 4399: Independent Study

### Fall 2016

ENGR 2301: Engineering Mechanics: Statics

CENG 4351/CENG 5351: Traffic Engineering: Operations and Control (with Lab)

CENG 5399: Independent Study

#### Spring 2017

ENGR 1204: Engineering Graphics I (with Lab)

CENG 3351: Transportation Engineering

CENG 4350/CENG 5359: Pavement Management Systems

CENG 5395: Thesis I

#### Fall 2017

CENG 4351/CENG5351: Traffic Engineering: Operations and Control (with Lab)

CENG 5395: Thesis I

CENG 5399: Independent Study

#### Spring 2018

CENG 3351: Transportation Engineering

CENG 4350/CENG 5360: Introduction to Pavement Engineering

CENG 5395: Thesis I

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CENG 5395: Thesis II
Fall 2018
      CENG 4351/CENG5351: Traffic Engineering: Operations and Control (with Lab)
      CENG 5395: Thesis I
      CENG 5395: Thesis II
      CENG 5399: Independent Study
      ENGR 1204: Engineering Graphics I (with Lab)
Spring 2019
      CENG 3351: Transportation Engineering
      CENG 4350/CENG 5359: Pavement Management Systems
      CENG 5395: Thesis I
      CENG 5395: Thesis II
      CENG 5399: Independent Study
Fall 2019
      CENG 4351/CENG5351: Traffic Engineering: Operations and Control (with Lab)
      ENGR 1204: Engineering Graphics I (with Lab)
Spring 2020
      CENG 3351: Transportation Engineering
      CENG 4350/CENG 5360: Introduction to Pavement Engineering
      CENG 5395: Thesis I
      CENG 5399: Independent Study
Fall 2020
      CENG 4351/CENG5351: Traffic Engineering: Operations and Control (with Lab)
      CENG 5395: Thesis II
      ENGR 1204: Engineering Graphics I (with Lab)
Spring 2021
      CENG 3351: Transportation Engineering
      CENG 4350/CENG 5359: Pavement Management Systems
      CENG 5395: Thesis I
Fall 2022
      CENG 4351/CENG5351: Traffic Engineering: Operations and Control (with Lab)
      ENGR 1204: Engineering Graphics I (with Lab)
      CENG 5395: Thesis I
Spring 2023
      CENG 3351: Transportation Engineering
      CENG 4350/CENG 5359: Pavement Management Systems (both Face-Face in Tyler and
      via zoom to HEC)
      CENG 5395: Thesis I
      CENG 5396: Thesis II
Fall 2023
      CENG 4351/CENG5351: Traffic Engineering: Operations and Control (with Lab)
      ENGR 1204: Engineering Graphics I (with Lab)
      CENG 5395: Thesis I
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## University of Nevada, Reno

(May 2012-July 2014)

❖ CEE 735, Pavement Management Systems, Fall 2012

❖ CEE 431/631, Pavement Design and Analysis, Spring 2013 and Spring 2014
 Arizona State University (January 2008-April 2009)

- ❖ CEE 353, Civil Engineering Materials, Fall 2008
- ❖ CEE 475, Highway Geometric Design, Spring 2009

## II. Teaching Conferences/Workshops Attended

- 1. Attended 2.25 hours of teaching professional development, The Center for Excellence in Teaching and Learning at UT Tyler, 2022-2023
- 2. Attended <u>21.5 hours</u> of teaching professional development, The Center for Excellence in Teaching and Learning at UT Tyler, 2019-2020
- 3. Student Writing FLC Meeting, Dr. Annamary Consalvo, January 31, 2020
- 4. Student Writing FLC Meeting, Dr. Annamary Consalovo, February 19, 2020
- 5. Work-Life Balance Faculty Learning Community Meeting, Drs. Sarah Sass, Stacy Zolkoski, Lauren Kirby, September 12, 2019
- 6. Advancing from Assistant to Associate Professor, Dr. Colleen Swain, September 12, 2019
- 7. Team Based Learning Modules 1-2, Judi Bradetich, September 20, 2019
- 8. Team Based Learning Modules 3-5, Judi Bradetich, September 20, 2019
- 9. Employment of International Students, Cynthia Martinez, October 8, 2019
- 10. Assignments with Impact, Dr. Jean Mandernach, October 11, 2019
- 11. Characteristics of the UT Tyler Student, Dr. Colleen Swain, October 18, 2019
- 12. Student Writing FLC Meeting, Dr. Annamary Consalvo, October 23, 2019
- 13. Scholar Works, Terra Gullings, October 24, 2019
- 14. Culture Shock and College Success, Cynthia Martinez, November 5, 2019 (1)
- 15. How To Feel As Bright And Capable As They THINK You Are: Why Capable People Suffer From Impostor Syndrome And How To Thrive In Spite Of It, Dr. Valerie Young, November 8, 2019
- 16. Increasing Accessibility for All, Sarah Norrell, November 12, 2019
- 17. Student Research FLC, Drs. Kassie Archer and Chris Thomas, November 13, 2019
- 18. Peer Learning and Sharing (Teaching Triangles), Dr. Debbie Koslover, November 19, 2019
- 19. Librarian and Faculty Collaboration the Sky's the Limit, Sarah Norrell, November 19, 2019
- 20. Attended and presented a paper at the ASEE-Gulf Southwest conference workshops (2018)
- 21. Teaching workshops presented by Dr. Ron Welch held at UT Tyler during the summer of 2014
- 22. Civil Engineering faculty teaching workshop, August 2014, August 2015, and August 2016
- 23. Attended "*Building Community*", offered by the UT Tyler Department of Academic Transformation, February 18<sup>th</sup>, 2015.
- 24. Attended "*Evaluating Participation*", offered by the UT Tyler Department of Academic Transformation, April 1<sup>st</sup>, 2015.
- 25. Attended "<u>Scholarship of Teaching and Learning</u>", offered by the UT Tyler Department of Academic Transformation, March 25<sup>th</sup>, 2015.
- 26. Attended "<u>Creating Research Posters</u>", offered by the UT Tyler Department of Academic Transformation, March 27<sup>th</sup>, 2015.

# III. Summary of Student Feedback for Evaluation Period (University Evaluation)

| Fall 2014-Spring 2015 Evaluation   | CENG<br>4351 | CENG<br>5351 | ENRG<br>2301 | CENG<br>3351 | CENG<br>4350 | CENG<br>5350 | Average |
|--|--------------|--------------|--------------|--------------|--------------|--------------|---------|
| The instructor clearly defined and explained the course objectives and expectations  | 4.67         | NA           | 4.16         | 4.04         | NA           | 4.00         | 4.22    |
| The instructor was prepared for each instructional activity.   | 4.67         | NA           | 3.81         | 4.09         | NA           | 4.00         | 4.14    |
| The instructor communicated information effectively.   | 4.67         | NA           | 3.65         | 3.83         | NA           | 3.67         | 3.96    |
| The instructor encouraged me to take an active role in my own learning.  | 4.00         | NA           | 3.90         | 4.00         | NA           | 4.33         | 4.06    |
| The instructor was available to students either electronically or in person.   | 4.33         | NA           | 4.06         | 3.96         | NA           | 3.67         | 4.01    |
| The course was organized well  | 4.67         | NA           | 3.84         | 3.87         | NA           | 3.67         | 4.01    |
| The instructor adhered to the expectations set forth in the syllabus and was clear about any changes that were made during the course. | 4.67         | NA           | 4.00         | 3.91         | NA           | 3.67         | 4.06    |
| The instructor was very interested in and enthusiastic about the subject matter  | 4.33         | NA           | 4.16         | 4.13         | NA           | 4.00         | 4.16    |
| The instructor used effective teaching methods that helped me learn  | 4.00         | NA           | 3.52         | 3.83         | NA           | 3.67         | 3.76    |
| Tests/assignments were returned promptly so that I could track my progress in the course   | 4.67         | NA           | 3.81         | 4.00         | NA           | 4.00         | 4.12    |
| The instructor created an instructional environment in which I felt comfortable participating/expressing my opinion                    | 4.67         | NA           | 3.94         | 4.13         | NA           | 3.67         | 4.10    |
| Overall, the instructor was  | 4.33         | NA           | 3.77         | 3.83         | NA           | 3.67         | 3.90    |
| Overall, this course was   | 4.33         | NA           | 3.77         | 3.83         | NA           | 3.00         | 3.73    |

| Fall 2015-Spring 2016<br>Evaluation   | CENG<br>4351 | CENG<br>5351 | ENRG<br>1204 | ENGR<br>2301 | <b>CENG</b> 3351 | ENGR<br>1204 | CENG<br>5350 | CENG<br>4353 | Average |
|---|--------------|--------------|--------------|--------------|------------------|--------------|--------------|--------------|---------|
| The instructor clearly defined and explained the course objectives and expectations | 4.36         | NA           | 4.63         | 4.36         | 4.67             | 4.23         | NA           | NA           | 4.45    |
| The instructor was prepared for each instructional activity.                        | 4.27         | NA           | 4.63         | 4.33         | 4.80             | 3.92         | NA           | NA           | 4.39    |
| The instructor communicated information effectively.                                | 4.18         | NA           | 4.38         | 4.09         | 4.53             | 3.85         | NA           | NA           | 4.21    |
| The instructor encouraged me to take an active role in my own learning.             | 4.27         | NA           | 4.38         | 4.21         | 4.53             | 4.23         | NA           | NA           | 4.32    |
| The instructor was available to students either electronically or in person.        | 4.27         | NA           | 4.13         | 4.33         | 4.40             | 3.92         | NA           | NA           | 4.21    |
| Overall, the instructor was   | 4.09         | NA           | 4.50         | 4.21         | 4.20             | 4.23         | NA           | NA           | 4.25    |

| Fall 2016-Spring 2017 Evaluation  | CENG<br>4351 | CENG<br>5351 | ENGR<br>2301 | CENG<br>3351 | <b>CENG</b> 5359 | ENGR<br>1204 | Average |
|---|--------------|--------------|--------------|--------------|------------------|--------------|---------|
| The instructor clearly defined and explained the course objectives and expectations | 4.64         | NA           | 4.54         | 4.13         | 4.00             | 4.30         | 4.32    |
| The instructor was prepared for each instructional activity.                        | 4.64         | NA           | 4.49         | 4.09         | 4.00             | 4.35         | 4.31    |
| The instructor communicated information effectively.                                | 4.36         | NA           | 4.29         | 3.87         | 4.20             | 4.22         | 4.19    |
| The instructor encouraged me to take an active role in my own learning.             | 4.45         | NA           | 4.37         | 3.83         | 4.20             | 4.26         | 4.22    |
| The instructor was available to students either electronically or in person.        | 4.18         | NA           | 4.39         | 4.04         | 4.20             | 4.22         | 4.21    |
| Overall, the instructor was   | 4.09         | NA           | 4.46         | 3.74         | 4.40             | 4.09         | 4.16    |
| Overall, this course was  | 4.09         | NA           | 4.37         | 3.7          | 4.4              | 4.13         | 4.14    |

| Fall 2017-Spring 2018 Evaluation  | CENG<br>4351 | CENG<br>5351 | CENG<br>3351 | CENG<br>4350 | CENG<br>5360 | Average |
|---|--------------|--------------|--------------|--------------|--------------|---------|
| The instructor clearly defined and explained the course objectives and expectations | 4.67         | 4.43         | 4.64         | 4.80         | 5.00         | 4.71    |
| The instructor was prepared for each instructional activity.                        | 4.58         | 4.29         | 4.68         | 4.80         | 5.00         | 4.67    |
| The instructor communicated information effectively.                                | 4.50         | 4.43         | 4.64         | 4.80         | 4.83         | 4.64    |
| The instructor encouraged me to take an active role in my own learning.             | 4.50         | 4.00         | 4.68         | 4.00         | 5.00         | 4.44    |
| The instructor was available to students either electronically or in person.        | 4.42         | 4.71         | 4.41         | 4.20         | 4.67         | 4.48    |
| Overall, the instructor was   | 4.25         | 4.29         | 4.50         | 4.80         | 4.83         | 4.53    |
| Overall, this course was  | 4.25         | 4.14         | 4.41         | 4.8          | 5.00         | 4.52    |

| Fall 2018-Spring 2019 Evaluation  | CENG<br>4351 | ENGR<br>1204 | CENG<br>3351 | CENG<br>4350 | CENG<br>5359 | Average |
|---|--------------|--------------|--------------|--------------|--------------|---------|
| The instructor clearly defined and explained the course objectives and expectations | 4.69         | 3.50         | 4.48         | 4.80         | 4.67         | 4.43    |
| The instructor was prepared for each instructional activity.                        | 4.69         | 4.50         | 4.74         | 4.80         | 5.00         | 4.75    |
| The instructor communicated information effectively.                                | 4.63         | 4.00         | 4.52         | 4.80         | 5.00         | 4.59    |
| The instructor encouraged me to take an active role in my own learning.             | 4.56         | 5.00         | 4.43         | 4.80         | 5.00         | 4.76    |
| The instructor was available to students either electronically or in person.        | 4.56         | 5.0          | 4.30         | 4.80         | 5.00         | 4.73    |
| Overall, the instructor was   | 4.56         | 4.50         | 4.35         | 4.80         | 5.00         | 4.64    |
| Overall, this course was  | 4.56         | 4.00         | 4.35         | 4.60         | 5.00         | 4.50    |

| Fall 2019-Spring 2020 Evaluation  | CENG<br>4351 | CENG<br>5351 | ENGR<br>1204 | CENG<br>3351 | CENG<br>4350 | CENG<br>5360 | Average |
|---|--------------|--------------|--------------|--------------|--------------|--------------|---------|
| The instructor clearly defined and explained the course objectives and expectations | 4.57         | 4.75         | 4.50         | 4.31         | 3.50         | NA           | 4.33    |
| The instructor was prepared for each instructional activity.                        | 4.71         | 4.75         | 4.50         | 4.38         | 3.50         | NA           | 4.37    |
| The instructor communicated information effectively.                                | 4.64         | 4.75         | 4.00         | 4.04         | 3.50         | NA           | 4.19    |
| The instructor encouraged me to take an active role in my own learning.             | 4.50         | 5.00         | 3.75         | 4.15         | 3.50         | NA           | 4.18    |
| The instructor was available to students either electronically or in person.        | 4.50         | 5.00         | 3.75         | 4.23         | 3.50         | NA           | 4.20    |
| Overall, the instructor was   | 4.57         | 5.00         | 4.00         | 3.96         | 4.25         | NA           | 4.36    |
| Overall, this course was  | 4.57         | 4.75         | 4.00         | 4.04         | 4.25         | NA           | 4.32    |

| Fall 2020-Spring 2021 Evaluation  | CENG<br>4351 | CENG<br>5351 | ENGR<br>1204 | CENG<br>3351 | CENG<br>4350 | CENG<br>5359 | Average |
|---|--------------|--------------|--------------|--------------|--------------|--------------|---------|
| The instructor clearly defined and explained the course objectives and expectations | 4.58         | NA           | 4.11         | 4.59         | 4.50         | 4.40         | 4.44    |
| The instructor was prepared for each instructional activity.                        | 4.68         | NA           | 3.89         | 4.41         | 4.50         | 4.80         | 4.46    |
| The instructor communicated information effectively.                                | 4.53         | NA           | 4.00         | 4.41         | 4.50         | 4.20         | 4.33    |
| The instructor encouraged me to take an active role in my own learning.             | 4.53         | NA           | 4.11         | 4.47         | 4.50         | 4.40         | 4.40    |
| The instructor was available to students either electronically or in person.        | 4.58         | NA           | 3.89         | 4.12         | 4.33         | 4.60         | 4.30    |
| Overall, the instructor was   | 4.47         | NA           | 3.89         | 4.24         | 4.33         | 4.20         | 4.23    |
| Overall, this course was  | 4.42         | NA           | 4.11         | 4.18         | 4.00         | 4.20         | 4.18    |

| Fall 2021-Spring 2022 Evaluation  | CENG<br>4351 | ENGR<br>1204 | CENG<br>3351 | CENG<br>4353 | CENG<br>5360 | Average |
|---|--------------|--------------|--------------|--------------|--------------|---------|
| The instructor clearly defined and explained the course objectives and expectations | 4.80         | 3.92         | 3.82         | NA           | 4.57         | 4.28    |
| The instructor was prepared for each instructional activity.                        | 4.60         | 4.00         | 3.88         | NA           | 4.71         | 4.30    |
| The instructor communicated information effectively.                                | 4.40         | 3.33         | 3.47         | NA           | 4.57         | 3.94    |
| The instructor encouraged me to take an active role in my own learning.             | 4.70         | 3.83         | 3.76         | NA           | 4.71         | 4.25    |
| The instructor was available to students either electronically or in person.        | 4.70         | 3.42         | 3.65         | NA           | 4.71         | 4.12    |
| Overall, the instructor was   | 4.50         | 3.42         | 3.29         | NA           | 4.71         | 3.98    |
| Overall, this course was  | 4.40         | 3.75         | 3.35         | NA           | 4.57         | 4.02    |

| Fall 2022-Spring 2023 Evaluation  | CENG<br>4351 | CENG<br>5351 | ENGR<br>1204 | CENG<br>3351 | CENG<br>4350 | CENG<br>5359 | Average |
|---|--------------|--------------|--------------|--------------|--------------|--------------|---------|
| The instructor clearly defined and explained the course objectives and expectations | 4.67         | 4.50         | 3.88         | 4.71         | NA           | 4.86         | 4.52    |
| The instructor was prepared for each instructional activity.                        | 4.83         | 4.50         | 4.12         | 4.88         | NA           | 4.86         | 4.64    |
| The instructor communicated information effectively.                                | 4.83         | 4.50         | 3.94         | 4.76         | NA           | 4.86         | 4.58    |
| The instructor encouraged me to take an active role in my own learning.             | 4.83         | 4.25         | 3.76         | 4.82         | NA           | 4.86         | 4.50    |
| The instructor was available to students either electronically or in person.        | 4.83         | 4.50         | 3.82         | 4.88         | NA           | 4.86         | 4.58    |
| Overall, the instructor was   | 4.67         | 4.25         | 3.82         | 4.76         | NA           | 4.86         | 4.47    |
| Overall, this course was  | 4.50         | 4.25         | 3.82         | 4.76         | NA           | 4.86         | 4.44    |

<sup>\*</sup>NA: Evaluation report not generated for classes with less than five students

#### PROFESSIONAL SERVICE ACTIVITIES

- 1. Professional Engineer #136203, Texas Board of professional Engineers (2019-Present)
- 2. Board Member, Traffic Safety Board, City of Tyler, TX (2020-2022)
- 3. Subcommittee Chair, Standing Committee on Design and Rehabilitation of Asphalt Pavements Young Members Subcommittee (AFD60) (2013-2020).
- 4. Handling Editor, Transportation Research Record Journal
- 5. Editorial Board Member, Journal of Materials and Engineering Structures
- 6. Editorial Board Member, Insight-Civil Engineering Journal
- 7. Editorial Board Member, Soft Computing in Civil Engineering Journal
- 8. Member, Standing Committee on Design and Rehabilitation of Asphalt Pavements (AKP30), Transportation Research Board (2020-Present).
- 9. Member, Standing Committee on Asphalt Mixture Evaluation and Performance (AKM40), Transportation Research Board (2020-Present).
- 10. National Panel Member, NCHRP 09-67 Project: New Materials & Technology Deployment in Asphalt Pavement Structural Design (2021-Present).
- 11. NSF Panel Member for the Graduate Fellowship Program: 2017-Present.
- 12. Technical Committee Member, Rubberized Asphalt-Asphalt Rubber Conference (2022)
- 13. Technical Committee Member, 8<sup>th</sup> International Conference Bituminous Mixtures and Pavements, Thessaloniki, Greece (2024)
- 14. Technical Committee Member, ASCE International Conference on Transportation and Development (2023)
- 15. National Panel Member, NCHRP 09-59 Project: Relating Asphalt Binder Fatigue Properties to Asphalt Mixture Fatigue Performance (2014-2019).
- 16. Member, Standing Committee on Asphalt Binders (AFK20), Transportation Research Board (2014-2020).
- 17. Member, Standing Committee on Design and Rehabilitation of Asphalt Pavements (AFD60), Transportation Research Board (2012-2020).
- 18. Member, Surface Requirements of Asphalt Mixtures (AFK40), Transportation Research Board (2012-2020).
- 19. Technical Committee Member, Advances in Materials and Pavement Performance Prediction Conference (2020)
- 20. Technical Committee Member, ICMPA 2022, 11th International Conference on Managing Pavement Assets (2022)
- 21. Technical Committee Member, Rubberized Asphalt Rubber Conference (2015)
- 22. Technical Committee Member, 2<sup>nd</sup> Conference on Sustainable Asphalt Pavements in the Middle East (2017)
- 23. Technical Committee Member, International Conference on Advances in Sustainable Construction Materials & Civil Engineering Systems (ASCMCES-17) (2017)
- 24. Technical Committee Member, Rubberized Asphalt Rubber Conference (2018)
- 25. Technical Committee Member, The 2018 International Society in Asphalt Pavements (ISAP) (2018)
- 26. Life Time Member and Fellow, International Road Federation.
- 27. Member, Association of Asphalt Paving Technologists
- 28. Life Time Member, Chi Epsilon.
- 29. Life Time Member, Tau Beta Pi.

- 30. Life Time Member, Order of the Engineer.
- 31. Member, Phi Kappa Phi Association.
- 32. Member, American Society of Engineering Education
- 33. Reviewer, ASCE Journal of Materials in Civil Engineering
- 34. Reviewer, ASCE Journal of Transportation Engineering
- 35. Reviewer, Advances in Civil Engineering Materials ASTM Journal.
- 36. Reviewer, Construction and Building Materials Journal
- 37. Reviewer, Transportation Research Board.
- 38. Reviewer, Journal of Civil Engineering and Architecture.
- 39. Reviewer, International Journal of Pavement Research and Technology
- 40. Reviewer, International Journal of Pavement Engineering
- 41. Friend, Characteristics of Bituminous Paving Mixtures to Meet Structural Requirements Committee (AFK50), Transportation Research Board.
- 42. Assisted Prof. Peter Sebaaly and Dr. Elie Hajj in preparing the Superpave Performance Grade and Volumetric Mix Design workshop, October 2013.
- 43. Assisted Prof. Peter Sebaaly and Dr. Elie Hajj in preparing the Asphalt Binders Grading systems and HMA Mix Designs workshop, March 2013.
- 44. Assisted Prof. Peter Sebaaly and Dr. Elie Hajj in preparing the Pavement Engineering and Green Technologies workshop, March 2013.
- 45. Assisted Dr. Elie Hajj in preparing the Nevada Department of Transportation Pavement-ME workshop, March 2013.
- 46. Assisted Dr. Elie Hajj in preparing the Nevada Department of Transportation PWL workshop, February 2014.
- 47. Assisted Prof. Michael Mamlouk (ASU) in preparing the solution manual for the 3rd edition of the Materials for Civil and Construction Engineers Textbook, 2011.
- 48. Senator, Association of Graduate Civil Engineers, Arizona State University (2010-2011).
- 49. Student Leader, International Student Club, Arizona State University (2009-2012).
- 50. Student Member, Institution of Transportation Engineers, Arizona Chapter (2008-2012).
- 51. Student Member, American Society of Civil Engineers, ASU Chapter (2008-2012).
- 52. Reviewer Judge, Graduate Professional Student Association, ASU (2010-2012).

## **UNIVERSITY SERVICE ACTIVITIES**

## University of Texas at Tyler

(July 2014-Present)

- 1. Chair, T&P Civil Engineering Department Committee, UT Tyler, 2022-Present
- 2. **President-Elect**, College of Engineering Faculty Governance (COEFGO), 2023-Present
- 3. Member, First-Year Read Committee, UT Tyler, 2020-Present
- 4. Member, Center for Excellence in Teaching and Learning Advisory board, 2022-Present
- 5. Member, Center of Ethics, UT Tyler, 2022-Present
- 6. Member, T&P college of Engineering Committee, UT Tyler, 2020-Present
- 7. Member, Civil Engineering faculty search committee (Dr. Mayzan Isied), 2023
- 8. Member, Civil Engineering faculty search committee (Dr. Elina Efthymiou), 2023

- 9. Member, Civil Engineering faculty search committee (Dr. Kostas Kalfas), 2023
- 10. Senator, University Faculty Senate, 2017-2020
- 11. Member, University International Studies and Intercultural Affairs Committee, 2014-2017
- 12. Member, University Interdisciplinary Research (IDR) Task Force (2017-2018)
- 13. Member, Ad Hoc Group on Student Evaluations Faculty Senate Committee (2019)
- 14. Member, UT Tyler Student Appeal Committee, 2019-2020
- 15. Secretary, College of Engineering Faculty Governance (COEFGO), 2016-2017
- 16. Member, the 20th Anniversary College of Engineering Celebration Committee, 2016-2017
- 17. **Program Coordinator**, Civil Engineering Department Graduate Coordinator, 2015-Present
- 18. **Chair**, Civil Engineering faculty search committee (successfully hired Mr. Joe Boylan), 2016
- 19. IT Committee member, College of Engineering Faculty Governance (COEFGO), 2019
- 20. Judge, The Honors Conference at UT Tyler, April 5<sup>th</sup> 2019
- 21. Judge, The UT Tyler Lyceum Conference, April 2023
- 22. Judge, The UT Tyler Lyceum Conference 2019
- 23. Proctor, Civil Engineering Gateway Exam on April 6<sup>th</sup> 2019
- 24. Chair, MSCE thesis committee (Mr. Rami Khalifeh), 2023
- 25. Chair, MSCE thesis committee (Mr. Prashanta Acharjee), 2023
- 26. Chair, MSCE thesis committee (Mr. Nitish Bastola), 2020
- 27. **Chair**, MSCE thesis committee (Mr. Mayzan Isied), 2019
- 28. Chair, MSCE committee (Mr. Joshua Davis), 2019
- 29. Chair, MSCE thesis committee (Mr. Pedro Zavagna), 2018
- 30. Chair, MSCE thesis committee (Mr. Hemant Gc), 2018
- 31. Chair, MSCE thesis committee (Mr. Ashish Tripathi), 2018
- 32. Chair, MSCE thesis committee (Mr. Karthikeyan Loganathan), 2018
- 33. Chair, Design research project committee (Mr. Shaun Spivey), 2014
- 34. Representative, UT Tyler Transportation Research Board, 2014-Present
- 35. Representative, UT Tyler Forth Annual Engineering Roundtable NTCC Event, 2017
- 36. Representative, the Undergraduate Research Day at the Capitol, 2017
- 37. Department Representative, UT Tyler Preview Day, 2016
- 38. Member, Civil Engineering faculty search committee at HEC (Dr. Zafer Miqdadi), 2015
- 39. Member, CE Graduate program academic self-study committee, 2015
- 40. Member, CE UT Tyler ABET self-study committee, 2014, 2020