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ACADEMIC POSITION

University of Texas at Tyler

Aug. 2024 - Present

Department of Civil and Construction Engineering and Management

Assistant Professor of Instruction

Tyler, TX

EDUCATION

Purdue University

Aug. 2018 - May. 2024

Ph.D., School of Construction Management Technology

West Lafayette, IN

Dissertation Title: Integration of Artificial Intelligence and Human Factors in Mobile Work Zones and Roundabouts for Safety and Performance Monitoring

Southeast University

Aug. 2014 - Jun. 2018

B.E., Engineering Mechanics, School of Civil Engineering

Nanjing, China

RESEARCH INTERESTS

Human Factors in Construction and Transportation, Construction Worker Health and Safety Management, Computer Vision, Wearable Sensors

PUBLICATIONS

[1] **Tian, C.**, Chen, Y., Zhang, J., & Feng, Y.* (2024). Integrating Domain Knowledge with Deep Learning Model for Automated Worker Activity Classification in mobile work zone. *Journal of Information Technology in Construction (ITcon)*, 29(13), 264-280. DOI: [10.36680/j.itcon.2024.013](https://doi.org/10.36680/j.itcon.2024.013)

[2] Zhang, C., **Tian, C.**, Han, T., Li, H., Feng, Y.*, Chen, Y., Proctor, R., & Zhang, J. (2025). Evaluation of Infrastructure-based Warning System on Driving Behaviors – A Roundabout Study. *IEEE Transactions on Intelligent Transportation Systems*. DOI: [10.1109/TITS.2025.3548508](https://doi.org/10.1109/TITS.2025.3548508)

[3] Daoud, R., Vechione, M.*, Gurbuz, O., Sundaravadivel, P., & **Tian, C.** (2025). Comparison of Machine Learning Models to Predict Nighttime Crash Severity: A Case Study in Tyler, Texas, USA. *Vehicles*. DOI: [10.3390/vehicles7010020](https://doi.org/10.3390/vehicles7010020)

- [4] Feng, Y. *, Chen, Y., Zhang, J., **Tian, C.**, Ren, R., & Proctor, R. (2023). Human-Centered Design of Next Generation Transportation Infrastructure with Connected and Automated Vehicles: A System-of-Systems Perspective. *Theoretical Issues in Ergonomics Science*. 1-29 DOI: [10.1080/1463922X.2023.2182003](https://doi.org/10.1080/1463922X.2023.2182003)
- [5] Ren, R., Li, H., Han, T., **Tian, C.**, Zhang, C., Zhang, J. *, Proctor, R., Chen, Y., & Feng, Y. (2023). Vehicle Crash Simulations for Safety: Introduction of Connected and Automated Vehicles on the Roadways. *Accident Analysis and Prevention*. 186, 107021. DOI: [10.1016/j.aap.2023.107021](https://doi.org/10.1016/j.aap.2023.107021)
- [6] Guo, X., **Tian, C.**, Chen, Y. *, & Zhang, J. (2021). Case Study of Building Information Modeling Implementation in Infrastructure Projects. *Transportation Research Record*. 2676 (2) DOI: [10.1177/03611981211045060](https://doi.org/10.1177/03611981211045060)
- [7] **Tian, C.***, Feng, Y., Chen, Y., & Zhang, J (2025). Highway Worker’s Perception of Autonomous Truck-Mounted Attenuator: A Case Study in Indiana DOT. *International Conference on Transportation and Development 2025 (ICTD 2025)* Glendale, AZ. Jul. 2025. (**Accepted**)
- [8] **Tian, C.**, Chen, Y.*, Feng, Y., & Zhang, J. (2024). Fine-Tuning Vision Transformer (ViT) to Classify Highway Construction Workers’ Activities. *Construction Research Congress 2024 (CRC 2024)*. Des Moines, IA. Mar. 2024. DOI: [10.1061/9780784485262.116](https://doi.org/10.1061/9780784485262.116)
- [9] **Tian, C.***, Wu., H.*, Chen, Y.*, Feng, Y. *, & Zhang, J.* (2023). Exploration of Latent Themes in Truck-Mounted Attenuator (TMA) Related Accidents using Natural Language Processing. *2023 ASCE International Conference on Computing in Civil Engineering (i3CE 2023)*. Corvallis, OR, Jun. 2023. DOI: [10.1061/9780784485224.02](https://doi.org/10.1061/9780784485224.02)
- [10] **Tian, C.***, Kang, K. *, Zheng, Y. *, Song, K. *, & Debs, L.* (2023). Feasibility of Low-Cost 3D Reconstruction of Small Infrastructure Assets: A Case Study of Fire Hydrants. *2023 ASCE International Conference on Computing in Civil Engineering (i3CE 2023)*. Corvallis, OR, Jun. 2023. DOI: [/10.1061/9780784485224.043](https://doi.org/10.1061/9780784485224.043)
- [11] **Tian, C.**, Chen, Y.*, Feng, Y., & Zhang, J. (2022). Worker Activity Classification using Multimodal Data Fusion from Wearable Sensors. *19th International Conference on Computing in Civil & Building Engineering (ICCCBE 2022)*. Cape Town, South Africa. Oct. 2022. DOI: [10.1007/978-3-031-35399-4_12](https://doi.org/10.1007/978-3-031-35399-4_12)
- [12] **Tian, C.***, Xiao, J.*, Chen, Y.*, Feng, Y.*, & Zhang, J*. (2022) Implementation, Benefits, and Challenges of Autonomous Truck-Mounted Attenuator. *International Conference on Transportation and Development 2022 (ICTD 2022)* (pp. 120-128). Seattle, WA. May. 2022. DOI: [10.1061/9780784484333.011](https://doi.org/10.1061/9780784484333.011)

Student Organization Advisor

Construction Management Student Association – UT Tyler Student Chapter

Institute for Transportation Engineers – UT Tyler Student Chapter

ASCE Timber-Strong Design Build Competition – UT Tyler Student Chapter

Reviewer

Reviewer, Journal of Computing in Civil Engineering, ASCE

Reviewer, Transportation Research Record

Reviewer, 60th ASC (Associated Schools of Construction) Annual Conference

Reviewer, 22nd COTA International Conference of Transportation Professionals

Reviewer, ASCE International Conference on Computing in Civil Engineering

Reviewer, ASCE Construction Research Congress 2022

Reviewer, ASCE Construction Research Congress 2020