

4/1/23 to 9/30/23

Publications

1. Huang, M., Ahmadian, M., Rahimi, A., and Steinginga, L., Dynamics Performance of Long Combination Vehicles with Active Control Systems, *Vehicle System Dynamics*, Vol. 61, No. 7, May 2023, pp. 1829 - 1878. (<https://doi.org/10.1080/00423114.2023.2194545>). (Virginia Tech)
2. Ali, G., McLaughlin, S., and Ahmadian, M., The Surface Accelerations Reference — A Large-Scale, Interactive Catalog of Passenger Vehicle Accelerations, *IEEE Transactions on Intelligent Transportation Systems*, April 2023 (online). (<https://doi.org/10.1109/TITS.2023.3267844>). (Virginia Tech)
3. Radmehr, A., Mirzaei, M., Larson, I., Holton, C., and Ahmadian, M., Railroad Track Gage Widening Assessment Using On-board Doppler LiDAR Velocity Measurements and Unsupervised Machine Learning Technique, The 2023 International Association of Vehicle System Dynamics (IAVSD) Bi-Annual Conference, Ottawa, Canada, August 21 – 25, 2023. (Virginia Tech)
4. Chen, Y., Neighborgall, C., Zheng, X., and Ahmadian, M., Field Testing and Performance Evaluation of Roll Stability Control System of Double-trailer Trucks, The 2023 International Association of Vehicle System Dynamics (IAVSD) Bi-Annual Conference, Ottawa, Canada, August 21 – 25, 2023. (Virginia Tech)
5. Zhang, Z., Chen, Y., and Ahmadian, M., Interconnected Roll Stability Control System for Semitrucks with Double Trailers, 2023-01-0906, ISSN: 0148-7191, e-ISSN: 2688-3627, WCX SAE International World Congress Experience, Detroit, MI, April 18 – 20, 2023. (Virginia Tech)
6. Soufiane, K, Zarembski, A. M. and Palese, J. W., Forecasting Crosstie Condition Based on the Dynamic Adjacent Support Using a Theory-Guided Neural Network Model” Proceedings of the Institution of Mechanical Engineers, *Journal of Rail and Rapid Transit*, September 2023 <https://doi.org/10.1177/09544097231203275>. (University of Delaware)
7. Olubode, O., Pantograph Carbon Strip Degradation Monitoring – Pulsed Power Application Using Electromagnetic Dot, Dissertation, Department of Electrical and Computer Engineering, University of Nevada, Las Vegas. August 2023. (University of Nevada Las Vegas)
8. Hasnat, A., Development of Non-Proprietary Ultra-High-Performance Concrete and Railway Tie Application Ph.D. Dissertation, Department of Civil and Environment Engineering and Construction, University of Nevada, Las Vegas, June 2023. (University of Nevada Las Vegas)
9. Hasnat, A. and Ghafoori, N., Transport Properties and De-icing Salt Resistance of Blended Ultra High-Performance Concrete. *ASCE Journal of Cold Regions Engineering*, 2023, DOI: 10.1061/JCRGEI/CRENG-724. (University of Nevada Las Vegas)

Other publications, conference papers and presentations

1. Ahmadian, M., Dynamics Performance of Long Combination Vehicles with Active Control Systems, Keynote Presentation at the 2023 International Association of Vehicle System Dynamics (IAVSD) Bi-Annual Conference, Ottawa, Canada, August 21 – 25, 2023. (Virginia Tech)

2. Ahmadian, M., Railroad Track Gage Widening Assessment Using On-board Doppler LiDAR Velocity Measurements and Unsupervised Machine Learning Technique, Presentation at the 2023 International Association of Vehicle System Dynamics (IAVSD) Bi-Annual Conference, Ottawa, Canada, August 21 – 25, 2023. (Virginia Tech)
3. Ahmadian, M., Field Testing and Performance Evaluation of Roll Stability Control System of Double-trailer Trucks, Presentation at the 2023 International Association of Vehicle System Dynamics (IAVSD) Bi-Annual Conference, Ottawa, Canada, August 21 – 25, 2023. (Virginia Tech)
4. Soufiane, K, Zarembski, A. M. and Palese, J. W., Effect of Failing Adjacent Crossties on Tie-Life: A Machine Learning Model, International Heavy Haul Railways Conference, Rio de Janeiro, Brazil, August 2023 (University of Delaware)