

### VTI Publications List

- Aatique, M., Mizusawa, G., & Woerner, B. D. (1997). *Performance of hyperbolic position location techniques for code division multiple access*. Paper presented at the Proceedings of the Wireless '97, Calgary, Canada.
- Ahmadian, M. (1997a). *A hybrid semiactive control for secondary suspension applications, proceedings of the sixth asme symposium on advanced automotive technologies*. Paper presented at the Proceedings of the Sixth ASME Symposium on Advanced Automotive Technologies - 1997 ASME International Congress and Exposition, Dallas, TX.
- Ahmadian, M. (1997b). *Semiactive control of multiple degree of freedom systems*. Paper presented at the Proceedings of the 1997 ASME Design Engineering Technical Conference, Sacramento, CA.
- Ahmadian, M. (1999a). *Design and development of magneto-rheological dampers for bicycle suspensions*. Paper presented at the Proceedings of the 1999 ASME International Congress and Exposition, Nashville, TN.
- Ahmadian, M. (1999b). *Filtering effects of mid-cord offset measurements on track geometry data*. Paper presented at the Proceedings of the 1999 IEEE/ASME Joint Rail Conference, Dallas, TX.
- Ahmadian, M. (1999). On the isolation properties of semiactive dampers. *Journal of Vibration and Control*, 5(2), 217-232. doi: 10.1177/107754639900500204
- Ahmadian, M. (2001a). *The noise and vibration benefits of soft-mounted locomotive cabs*. Paper presented at the Proceedings of the 2001 IEEE/ASME Joint Rail Conference, Toronto, Canada.
- Ahmadian, M. (2001b). *On the design of magneto rheological recoil dampers for fire out of battery control*. Paper presented at the Proceedings of the 10th Gun Dynamics Symposium, Dallas, TX.
- Ahmadian, M., & Ahn, Y. K. (2000). Performance analysis of magneto-rheological mounts. *Journal of Intelligent Material Systems and Structures*, 10(3), 248-256. doi: 10.1177/1045389X9901000307
- Ahmadian, M., & Cantwell, R. (1999). *Effect of pedestal liner clearance and resilience on rail vehicle operation*. Paper presented at the Proceedings of the ASME Rail Transportation Division, Chicago, IL.
- Ahmadian, M., & DeGuilio, A. P. (2001). Recent advances in the use of piezoceramics for vibration suppression. *Shock and Vibration Digest*, 33(1), 15-22. doi: 10.1177/058310240103300102
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- Ahmadian, M., & Huang, W. (2000). *Effect of self-steering locomotive trucks in improving adhesion on curved tracks*. Paper presented at the Proceedings of the 2000 IEEE/ASME Joint Rail Conference, Newark, NJ.

- Ahmadian, M., & Huang, W. (2002). A qualitative analysis of the dynamics of self-steering locomotive trucks. *Vehicle System Dynamics: International Journal of Vehicle Mechanics and Mobility*, 37(2), 85-127. doi: 10.1076/vesd.37.2.85.3537
- Ahmadian, M., & Jeric, K. M. (1999). *The application of piezoceramics for reducing noise and vibrations in vehicle structures*. Paper presented at the Proceedings of the 1999 SAE Off-Highway Equipment Congress and Exposition, Indianapolis, IN.
- Ahmadian, M., & Jeric, K. M. (2001). On the application of electrically shunted piezoceramics for increasing acoustic transmission loss in structures. *Journal of Sound and Vibration*, 243(2), 347-359. doi: 10.1006/jsvi.2000.3417
- Ahmadian, M., & Jeric, K. M. (In review). An experimental analysis of the benefits of shunted piezoceramics for damped and undamped structures. *Journal of Sound and Vibration*.
- Ahmadian, M., Jeric, K. M., & Inman, D. J. (2001). An experimental evaluation of smart damping materials for reducing structural noise and vibrations. *Journal of Vibration and Acoustics*, 123(4), 533-535. doi: 10.1115/1.1389459
- Ahmadian, M., & Mosch, E. C. (1997). *Designing heavy truck suspensions for reduced road damage*. Paper presented at the Proceedings of the Sixth International Conference on Recent Advances in Structural Dynamics, Southampton, England.
- Ahmadian, M., & Pare, K. (2000). A quarter-car experimental analysis of alternative semiactive control methods. *Journal of Smart Material Systems and Structures*, 11(8), 604-612. doi: 10.1106/MR3W-5D8W-0LPL-WGUQ
- Ahmadian, M., & Poynor, J. C. (1999). *Application of magneto rheological dampers for controlling shock loading*. Paper presented at the Proceedings of the 1999 ASME International Congress and Exposition, Nashville, TN.
- Ahmadian, M., & Poynor, J. C. (2001). An evaluation of magneto-rheological dampers for controlling gun recoil dynamics. *Shock and Vibration*, 8(3-4), 147-155. doi: 10.1155/2001/674830
- Ahmadian, M., Reichert, B. A., & Song, X. (1997a). Experimental and simulation analysis of magneto-rheological damper control systems and their application to vehicle seat suspensions: Final report. Cary, NC: Lord Corporation.
- Ahmadian, M., Reichert, B. A., & Song, X. (1997b). *Harmonic analysis of semiactive suspensions*. Paper presented at the Proceedings of the 1997 ASME Design Engineering Technical Conference, Sacramento, CA.
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- Ahmadian, M., & Simon, D. E. (2001). *An analytical experimental evaluation of magneto rheological suspensions for heavy trucks*. Paper presented at the Proceedings of the 17th IUTAM International Symposium on Dynamics of Vehicles on Road and Tracks, Lyngby, Denmark.

- Ahmadian, M., Simon, D. E., McLellan, N. S., & Carter, A. K. (1997). *Application of adaptive suspensions for intelligent heavy vehicles: Final report*. Washington, D.C.: Federal Highway Administration.
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- Ahmadian, M., Song, X., & Reichert, B. A. (1997b). *Semiactive control of structural resonance*. Paper presented at the Proceedings of the Eleventh Symposium on Structural Dynamics and Control, Blacksburg, VA.
- Ahmadian, M., Song, X., & Southward, S. C. (In review). Empirical modeling of magneto-rheological dampers. *Journal of Intelligent Material Systems and Structures*.
- Ahmadian, M., & Venezia, J. J. (2000). *An experimental evaluation of noise and vibrations in modern locomotive cabs*. Paper presented at the Proceedings of the 2000 IEEE/ASME Joint Rail Conference, Newark, NJ.
- Ahmadian, M., & White, D. L. (1999). *An experimental evaluation of the effect of rail vehicles truck suspensions on wheel-rail forces*. Paper presented at the Proceedings of the 1999 IEEE/ASME Joint Rail Conference, Dallas, TX.
- Ahn, K., Kronprasert, N., & Rakha, H. A. (2009). Energy and environmental assessment of high-speed roundabouts. *Transportation Research Record: Journal of the Transportation Research Board*, 2123, 54-65. doi: 10.3141/2123-07
- Ahn, K., & Rakha, H. A. (2006, September). *System-wide impacts of green extension transit signal priority*. Paper presented at the IEEE ITSC06 Conference, Toronto, Canada.
- Ahn, K., & Rakha, H. A. (2007, September). *Energy and environmental impacts of driver route choice decisions*. Paper presented at the IEEE ITSC07 Conference, Seattle, WA.
- Ahn, K., & Rakha, H. A. (2008). The effects of route choice decisions on vehicle energy consumption and emissions. *Transportation Research Part D: Transport and Environment*, 13(3), 151-167. doi: 10.1016/j.trd.2008.01.005
- Ahn, K., & Rakha, H. A. (2009). A field evaluation case study of the environmental and energy impacts of traffic calming. *Transportation Research Part D: Transport and Environment*, 14(6), 411-424. doi: 10.1016/j.trd.2009.01.007
- Ahn, K., Rakha, H. A., & El-Shawarby, I. (2007, April). *Study of catalytic converter impact and engineout emission modeling using in-vehicle on-road emission measurements*. Paper presented at the Second Ain Shams University International Conference on Environmental Engineering (ASCEE), Cairo, Egypt.

- Ahn, K., Rakha, H. A., & Park, S. (2013). Eco-drive application: Algorithmic development and preliminary testing. *Transportation Research Record: Journal of the Transportation Research Board*, 2341, 1-11.
- Ahn, K., Rakha, H. A., Trani, A., & Van Aerde, M. (2002). Estimating vehicle fuel consumption and emissions based on instantaneous speed and acceleration levels. *Journal of Transportation Engineering*, 128(2), 182-190. doi: 10.1061/(ASCE)0733-947X(2002)128:2(182)
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- Al-Kaisy, A. F., Bhatt, J., & Rakha, H. A. (2003, January-a). *Assessing the effect of heavy vehicles on the visibility of traffic signs at multilane highways*. Paper presented at the Transportation Research Board 82nd Annual Meeting, Washington, D.C.
- Al-Kaisy, A. F., Bhatt, J., & Rakha, H. A. (2003, January-b). *Modeling the effect of heavy vehicles on sign visibility at multilane highways*. Paper presented at the Transportation Research Board 82nd Annual Meeting, Washington, D.C.
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- Al-Kaisy, A. F., Jung, Y., & Rakha, H. A. (2005). Developing passenger car equivalency factors for heavy vehicles during congestion. *Journal of Transportation Engineering*, 131(7), 514-523. doi: 10.1061/(ASCE)0733-947X(2005)131:3A7(514)
- Al-Qadi, I. L. (2001). *Effectiveness of road mesh in flexible pavements: Final report*. Blacksburg, VA: Virginia Tech Transportation Institute.
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- Al-Qadi, I. L. (2002, September). *The proper use of geosynthetics in flexible pavements*. Paper presented at the 7th International Conference on Geosynthetics, Nice, France.
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- Al-Qadi, I. L., Clark, T. M., Lee, D. T., Lahouar, S., & Loulizi, A. (2003, January). *Combining traditional and non-traditional ndt techniques to evaluate virginia's interstate 81*. Paper presented at the 82nd Annual Meeting of the Transportation Research Board, Washington, D.C.

- Al-Qadi, I. L., Elseifi, M., & Leonard, D. (2003). Steel reinforcing nettings mechanism to delay reflective cracking in asphalt concrete overlays. *Journal of AAPT*, 82, 388-423.
- Al-Qadi, I. L., Elseifi, M., & Loulizi, A. (2001). *Geocomposite membrane effectiveness in flexible pavement*. (Final Report No. TRA-00-002). Blacksburg, VA: Virginia Tech Transportation Institute.
- Al-Qadi, I. L., & Elseifi, M. A. (2002, September). *Analytical modeling and field performance testing of geocomposite membrane in flexible pavement systems*. Paper presented at the 7th International Conference on Geosynthetics, Nice, France.
- Al-Qadi, I. L., Elseifi, M. A., & Wilkes, J. A. (2000). *Performance of geocomposite membrane in pavement systems*. Paper presented at the Proceedings of the 2nd European Geosynthetics Conference: EURO-Geo 2000, Bologna, Italy.
- Al-Qadi, I. L., Flintsch, G. W., Brandon, T. L., & Park, Y. (2000, June). *Relationship between fwd backcalculated resilient moduli of subbase layers at the virginia smart road and lab measured values*. Paper presented at the 5th Symposium on Unbound Aggregates in Roads, Nottingham, UK.
- Al-Qadi, I. L., Lahouar, S., & Loulizi, A. (2001). *Assessment of i-81 using ground penetrating radar: Final report*. Blacksburg, VA: Virginia Tech Transportation Institute.
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- Al-Qadi, I. L., Loulizi, A., Lahouar, S., Flintsch, G. W., & Freeman, T. E. (2003). Quantitative field evaluation and effectiveness of fine mix under hma base in flexible pavements. *Transportation Research Record: Journal of the Transportation Research Board*, 1823, 133-140. doi: 10.3141/1823-15
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- Al-Qadi, I. L., Nassar, W. M., Loulizi, A., & Reubush, S. D. (2000). *Resilient modulus measurements of hot-mix asphalt cores (the cole severance tax study). Final report*. Blacksburg, VA: Virginia Tech Transportation Institute.
- Al-Qadi, I. L. e. a. (2000). *Feasibility of using friction indicators to improve winter maintenance operations and mobility. Interim report*. Blacksburg, VA: Virginia Tech Transportation Institute.
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- Amer, A., Rakha, H. A., & El-Shawarby, I. (2011). Agent-based stochastic modeling of driver decision at the onset of a yellow indication at signalized intersections. *Transportation Research Record: Journal of the Transportation Research Board*, 2241, 68-77. doi: 10.3141/2241-08
- Amer, A., Rakha, H. A., & El-Shawarby, I. (2012). A novel stochastic procedure for designing yellow intervals at signalized intersections. *Journal of Transportation Engineering*, 138(6), 751-759. doi: 10.1061/(ASCE)TE.1943-5436.0000381
- Angell, L. S. (2010a). A comparison of the modified sternberg, peripheral detection tasks, and other surrogate methods. In G. Rupp (Ed.), *Performance metrics for assessing driver distraction: The quest for improved road safety*. Warrendale, PA: SAE International.
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- Belz, S. M., Winters, J. J., Robinson, G. S., & Casali, J. G. (1997, February). *Auditory icons: Using representational sounds to convey situational information in commercial motor vehicles*. Paper presented at the National Hearing Conservation Association Conference, Orlando, FL.
- Benedict, D., & Angell, L. S. (2010). Modified sternberg method for assessing event detection during driving. In G. Rupp (Ed.), *Performance metrics for assessing driver distraction: The quest for improved road safety*. Warrendale, PA: SAE International.
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- Blanco, M., Hankey, J. M., & Chestnut, J. A. (2005). *A taxonomy for secondary in-vehicle tasks based on eye glance and task completion time*. Paper presented at the Proceedings of the Human Factors and Ergonomics Society 49th Annual Meeting, Santa Monica, CA.
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