6/1/17 to 3/31/18

Publications

1. Hawthorne V. T., Hawthorne, K. L., and Ahmadian, M., "Railway Engineering," Mark's Standard Handbook for Mechanical Engineers, 12th Edition, Section 11.2, 2017. (Virginia Tech)
2. Hosseinipour, M., Naderi-Soorki, M., and Ahmadian, M., "On Effective Electromagnetic Shielding of Modern Pulse Width Modulating Adjustable Speed Drives," IEEE Transaction on Electromagnetic Compatibility, Vol. 60, Issue 4, October 2017, pp. 875 – 884. (DOI: https://doi.org/10.1109/TEMC.2017.2738840) (Virginia Tech)
3. Ghodrati, M., Ahmadian, M., and Mirzaeifar, R., "Investigating the rolling contact fatigue in rails using finite element method and cohesive zone approach," Proceedings of the 2018 ASME Joint Rail Conference, JRC2018, April 18-20, 2018, Pittsburgh, PA. (Virginia Tech)
4. Principal Component Analysis and Track Quality Index: A Machine Learning Approach, accepted at Elsevier Special Issue on Big Data in Railway Transportation, December 2017. (University of Delaware)
5. "Modeling tamping recovery of track geometry using the copula based approach." Journal of Rail and Rapid Transit. (University of Delaware)
6. E. Mortazavian, Z. Wang, and H. Teng, Thermal-Mechanical Study of 3D Printing Technology for Rapid Rail Repair, accepted for the Proceedings of the ASME 2018 International Mechanical Engineering Congress and Exposition, IMECE 2018, November 9-15, 2018, Pittsburgh, PA, USA. (UNLV)

Other publications, conference papers and presentations

1. Three posters presented at TRB conference in Washington DC in January 2018. (University of Delaware)
2. 6 posters presented at UD Big Data in Railroad Engineering December 13-14, 2017(University of Delaware)
3. Paper on Principal Component Analysis in the evaluation of Track Quality Indices presented at the Annual Inter-University Symposium on Infrastructure Management, Purdue University, June 2017. (University of Delaware)
4. Paper on Track Geometry Big Data Analysis: A Machine Learning Approach presented by IEEE International Conference on Big Data, Boston Massachusetts, December 2017. (University of Delaware)
5. Seminar presentation on Principal Component Analysis and Track Quality Index: A Machine Learning Approach presented at Transportation and Civil Infrastructure Seminar, November, Fall 2017. (University of Delaware)
6. Poster presentation at Delaware Data Science Symposium, University of Delaware, May 2017. (University of Delaware)
7. E. Mortazavian and Z. Wang, Mobile 3D Printing of Rail Track Surface for Rapid Repairment, Oral Presentation – presented at the 27th Annual Fall Transportation Conference, Las Vegas, NV, October 12, 2017. (UNLV)
8. Choi, J. O., Sapkota, S., Kaseko, M. S., & Teng, H., High speed Rail Access Charge for the XpressWest of Nevada. Oral Presentation – presented at the 27th Annual Fall Transportation

Conference, Las Vegas, NV, October 12, 2017. (UNLV)

9. Ryan Sherman, Developing Acoustic Technology to Detect Transverse Defects in Rail at High Speed, Oral Presentation – presented at the 27th Annual Fall Transportation Conference, Las Vegas, NV, October 12, 2017. (UNLV)

10. Yingtao Jiang, Development of a Platform to Enable Real Time, Non-Disruptive Testing and Early Fault Detection of Critical High Voltage Transformers and Switchgears in High-Speed Rail, Oral Presentation – presented at the 27th Annual Fall Transportation Conference, Las Vegas, NV, October 12, 2017. (UNLV)

11. E. Mortazavian and Z. Wang, Mobile 3D Printing of Rail Track Surface for Rapid Repairment, Oral Presentation – presented at the Seminar in Railroad Infrastructure, Las Vegas, NV. June 23, 2017. (UNLV)

12. Choi, J. O., Kaseko, M. S., and Teng, H. High Speed Rail Access charge for the XpressWest of Nevada. Seminar – presented at the Seminar in Railroad Infrastructure, Las Vegas, NV. June 23, 2017. (UNLV)

13. Ryan Sherman, Developing Acoustic Technology to Detect Transverse Defects in Rail at High Speed, Oral Presentation — presented at the Seminar in Railroad Infrastructure, Las Vegas, NV. June 23, 2017. (UNLV)

14. Yingtao Jiang, Development of a Platform to Enable Real Time, Non-Disruptive Testing and Early Fault Detection of Critical High Voltage Transformers and Switchgears in High Speed Rail, Oral Presentation – presented at the Seminar in Railroad Infrastructure, Las Vegas, NV. June 23, 2017. (UNLV)

15. E. Mortazavian and Z. Wang, Mobile 3D Printing of Rail Track Surface for Rapid Repairment, poster at the Railroad UTC Reception, Washington, D.C., January 2018.

16. Choi, J. O., Kaseko, M. S., and Teng, H. High speed rail access charge for the XpressWest of Nevada. Seminar – poster at the Railroad UTC Reception, Washington, D.C., January 2018. (UNLV)

17. Ryan Sherman, Developing Acoustic Technology to Detect Transverse Defects in Rail at High Speed, Oral Presentation — poster at the Railroad UTC Reception, Washington, D.C., January 2018. (UNLV)

18. Yingtao Jiang, Development of a Platform to Enable Real Time, Non-Disruptive Testing and Early Fault Detection of Critical High Voltage Transformers and Switchgears in High-Speed Rail, Oral Presentation – poster at the Railroad UTC Reception, Washington, D.C., January 2018. (UNLV)