



**Name: Prof. Alireza Ahmadi**  
**Rank: Professor - School of Aviation**  
**Acting Head of Aviation Academic Programs**

## Personal Information

**Nationality:** Iranian/Swedish  
**AU Joining Date:** 13 Oct 2023  
**E-Mail Address:** a.ahmadi@au.edu.kw

## Professional Information

<b>Education:</b>	PhD in Operation and Maintenance Engineering, Luleå University of Technology, Luleå-Sweden, 2010.
<b>Specialization:</b>	Reliability and Maintenance modeling of Air Vehicle and Railway assets.
<b>Current Academic Position:</b>	Professor - Aviation Engineering - AU Professor-Operation and Maintenance Engineering-LTU
<b>Current Professional Positions:</b>	NA
<b>Previous Administrative Position Held:</b>	NA
<b>Previous Academic Positions Held:</b>	2013-2016, Associate Professor - Operation and Maintenance Engineering- Luleå University of Technology.
<b>Fellowships And Honors:</b>	NA
<b>Teaching Experience:</b>	System Safety Assessment, Advance Reliability Engineering, Maintenance modelling and Optimization, Aircraft Maintenance Program development and Analysis Methodology, Maintenance Scheduling and Planning, Airline Maintenance and Engineering Management, Airworthiness, Aircraft Maintenance Cost Management, Reliability and Risk In Aviation Maintenance.

<b>Industrial And Technical Experience:</b>	<p>2009-Date, International Air Transport Association (IATA)-Training Consultant                  2016-2019, International Air Transport Association (IATA)-Country Manager                  2013-2016, Associate Professor - Operation and Maintenance Engineering- Luleå University of Technology, Luleå-Sweden.                  2014-2015, Project Consultants-Swedish Transport Agency (Trafikverket)                  2002-2006, Production Planning &amp; Control Manager- Aseman Airlines, Tehran, Iran.                  1998-2002, Line Maintenance Duty Manager - Aseman Airlines, Tehran, Iran.                  1995-1997, Aircraft Licensed Engineer - Aseman Airlines, Tehran, Iran.</p>
<b>Research Interest:</b>	<p>Data Science, RAMS engineering and modeling, Reliability engineering, Reliability modeling and Analysis, Technical Risk Analysis, System Safety Assessment, Safety Management System, Maintenance Modeling and Optimization, Aircraft Maintenance Analysis, Life Cycle Cost Optimization, Smart Assets, Diagnosis prognosis and health management, Transport infrastructure maintenance, Climate adaptation of Infrastructure Maintenance.</p>
<b>Research Grants:</b>	<p>The last five grants:</p> <ul style="list-style-type: none"> <li>• “Climate Adaptation of Railway Maintenance (ClimRail)” at LTU was funded (total: 5.05 MSEK) for 3 years (2023–2026) by Swedish xxxxxxxxxx (Vinnova), and co-funded by four Swedish Railway Authority (Trafikverket ), LKAB and BDX ab. Focus: to develop RCM-based decision support methodologies and tools for adaptation of railway infrastructure to the adverse effect of climatic hazards.</li> <li>• “Simulation of railway track geometry and intelligent maintenance planning (SIMTRACK)” at LTU was funded (total: 6.6 MSEK) for 3 years (2017–2020) by BVFF-Trafikverket and co-funded by four Swedish companies. Consortium involved Lulea University of Technology, Sweden road and transportation research institute (VTI1), Infranord AB, Luleå Railway Research Center. Focus: to develop simulation-based platform for optimization of track geometry maintenance planning and scheduling.</li> <li>• “Smart Maintenance and the Rail Traveller Experience (SMaRTE)” at LTU was funded (total: 544 K EURO) for 2 years (2017–2019) by Horizon 2020-Shift2Rail Joint Undertaking. Consortium involved 4 universities<sup>2</sup>, and 7 companies<sup>3</sup>. Focus: Development of an overall maintenance concept for condition-based maintenance (CBM) for passenger trains; and the integration of concepts for monitoring of infrastructure.</li> <li>• “Efficient Performance Based Air Vehicle Maintenance” at LTU was funded (total: 10 MSEK) for 4 years (2013–2017) by VINNOVA (Swedish National Aviation Research Program – NFFP6). Consortium involved Lulea University of Technology, SAAB Support and Services, SAAB Aeronautics and Systecon AB. Focus: Optimizing maintenance resources during aircraft retirement phase.</li> </ul>

1 Statens väg- och transportforskningsinstitut

2 University of Leeds, The University of Huddersfield, Lulea Tekniska Universitet , Instituto Superior Tecnico.

3 Fit Consulting, Fertagus Travessia Do Tejo Transportes, Lulea Flygteknik AB, Union Des Industries Ferroviaires Europeennes, Ergoproject, Union Internationale Des Transports Publics, London Underground Limited Lul.

	<ul style="list-style-type: none"> <li>• “Enhanced Life Cycle Assessment for Performance-Based Logistics” at LTU was funded (total: 7.6 MSEK) for 4 years (2009–2013) by VINNOVA (Swedish National Aviation Research Program – NFFP6). Consortium involved Lulea University of Technology, and SAAB Support and Services. Focus: Data mining of operational data for analysis of aircraft maintenance and support systems throughout life cycles.</li> </ul>
<p><b>Research and Publications including Journal and Books:</b></p>	<p><b>Journal Publication:</b></p> <ol style="list-style-type: none"> <li>1.Khosravi, M., Ahmadi, A. and Nissen, A, (2023) “A Multi-objective Approach for Position Alignment of Track Measurements”, Engineering Failure Analysis. 107260. <a href="https://doi.org/10.1016/j.engfailanal.2023.107260">https://doi.org/10.1016/j.engfailanal.2023.107260</a></li> <li>2. Marchetta, V., Graziano, A Di., Soleimanmeigouni I., Ahmadi, A. (2022) Proceedings of the Institution of Mechanical Engineers, Part F: Journal of ...Railway degradation behaviour analysis in narrow-gauge railways: A local-railway case study. <a href="https://doi.org/10.1177/09544097221136912">https://doi.org/10.1177/09544097221136912</a>.</li> <li>3.Khosravi, M., Soleimanmeigouni, i., Ahmadi, A., Nissen, A., Xiao, X, (2022) Modification of correlation optimized warping method for position alignment of condition measurements of linear assets, Measurement 201, 111707. <a href="https://doi.org/10.1016/j.measurement.2022.111707">https://doi.org/10.1016/j.measurement.2022.111707</a></li> <li>4.Khosravi, M., Soleimanmeigouni, I., Ahmadi, A., Nissen A., (2021) Reducing the positional errors of railway track geometry measurements using alignment methods: A comparative case study. Journal of Measurement, Volume 178, June 2021, 109383, <a href="https://doi.org/10.1016/j.measurement.2021.109383">https://doi.org/10.1016/j.measurement.2021.109383</a> .</li> <li>5.H Khajehei, A Ahmadi, I Soleimanmeigouni, M Haddadzade, A Nissen, (2022) Prediction of track geometry degradation using artificial neural network: a case study, International Journal of Rail Transportation 10 (1), 24-43</li> <li>6.Khajehei, H., Haddadzade, M., Ahmadi, A., Soleimanmeigouni, I., Nissen, A. (2021) Optimal opportunistic tamping scheduling for railway track geometry, Structure and Infrastructure Engineering 17 (10), 1299-1314.</li> <li>7.Khajehei, H., Soleimanmeigouni, I., Ahmadi, A., Nissen, A., Kumar U. (2021) Investigation of track geometry defects on a heavy-haul railway line., Journal of transportation engineering, Part A: Systems 147 (9), 05021004</li> <li>8.Khajehei, H., Ahmadi, A., Soleimanmeigouni, I., , M Haddadzade, A., Nissen. (2021) Prediction of track geometry degradation using artificial neural network: a case study, International Journal of Rail Transportation, 1-20</li> <li>9Soleimanmeigouni, I., Ahmadi, A., Khajehei, H., Nissen, A. (2020), Investigation of the effect of the inspection intervals on the track geometry condition, Structure and Infrastructure Engineering 16 (8), 1138-1146.</li> <li>10.Soleimanmeigouni, I., Ahmadi, A., Nissen, A., Xun, X., (2019), Prediction of railway track geometry defects: a case study, Journal of Structure and Infrastructure Engineering. Pp. 1-15. <a href="https://doi.org/10.1080/15732479.2019.1679193">https://doi.org/10.1080/15732479.2019.1679193</a></li> <li>1.Block, J., Ahmadi, A., Xun, X., &amp; Kumar, U. (2019), Spares Provisioning Strategy for Periodically Replaced Units within the Fleet Retirement Period,</li> </ol>

- International Journal of System Assurance Engineering and Management, Vol. 10, No.3, pp. 299-315, <https://doi.org/10.1007/s13198-019-00791-z>
- 12.Khajehei, H., Ahmadi, A., Soleimanmeigouni, I., and Nissen, A. (2019), Allocation of effective maintenance limit for railway track geometry', Structure and Infrastructure Engineering, Pages pp. 1597-1612, Vol. 15 No.12, <https://doi.org/10.1080/15732479.2019.1629464>
- 13.Soleimanmeigouni, I., Ahmadi, A., Kumar, U. (2018) Track geometry degradation and maintenance modeling: A review, in Institution of Mechanical Engineers. Proceedings. Part F: Journal of Rail and Rapid Transit. Vol. 232, No. 1, pp. 73–102. <https://doi.org/10.1177/0954409716657849>
- 14.Mahmood, Y.A., Garmabaki A.H S, Ahmadi, A., and Verma, A.K. (2018), Reliability Model for Frequency Converter in Electrified Railway, International Journal of Electrical Power and Energy Systems, Vol. 94, pp. 385–392. <https://doi.org/10.1016/j.ijepes.2017.08.002>
- 15.Ghodrati, B., Ahmadi, A., & Galar, D. (2017), Reliability Analysis of Switches and Crossings : A Case Study in Swedish Railway. International Journal of Railway Research, 4(1), 1–11. <http://ijrare.iust.ac.ir/article-1-124-en.html>
- 16.Soleimanmeigouni I., Ahmadi, A., Xiao X., Xie, M., Nissen, A. and Kumar, U., (2017), Modelling the evolution of ballasted railway track geometry by a two-level piecewise model, Structure and Infrastructure Engineering, Vol.14, No.1, pp. 33-45. <https://doi.org/10.1080/15732479.2017.1326946>
- 17.Pourgol-Mohammad, M., Hejazi, A., Soleimani, M., Ghasemi, P., Ahmadi A., Jalalivahid, D. (2017) Design for Reliability of Automotive Systems; Case Study of Dry Friction Clutch, International Journal of System Assurance Engineering and Management. Vol. 8, No. 3, pp. 572–583. <https://doi.org/10.1007/s13198-017-0644-2>
- 18.Pourgol-Mohammad, M., Makarachib P., Soleimanib, M., and Ahmadi, A. (2017) Reliability Enhancement of Centrifugal Pumps by Multi-Objective Genetic Algorithm Optimization, International Journal of COMADEM, Vo 20, No. 20, pp. 23-30. <https://www.scopus.com/record/display.uri?origin=inward&partnerID=40&eid=2-s2.0-85048732685>
- 19.Modiri, B., Pourgol-Mohammad, M., Yazdani M., Salimi H., Salehpour-Oskouei F., and Ahmadi, A. (2017) Stochastic lifetime estimation of pressurized gas pipeline, Case study of the urban gas pipeline, International Journal of COMADEM, Vo20., No. 2 pp. 31-37. <http://ltu.diva-portal.org/smash/record.jsf?pid=diva2%3A1172537&dswid=-2840>
- 20.Ahmadi, A., Soleimanmeigouni, I., and Block., J. Letot, C. (2016), Optimum failure management strategy for periodically inspected units with imperfect maintenance. Conference paper in Journal, 8th IFAC Conference on Manufacturing Modeling, Management and Control, Troyes, FRANCE, Troyes, France. Vol. 49, No.12, Pages 799–804. <https://reader.elsevier.com/reader/sd/pii/S2405896316311582?token=81B57D94D458DD834FF558B3DC1CC4E9AA854DCAD1B320F66BD41163A940A5E91DA8213A79195E67A60417F02274F39D>

21. Soleimanmeigouni, I., Ahmadi, A., Arasteh khouy, I., Letot, C. (2016) Evaluation of tamping effect on the track geometry condition: a case study, In: Institution of Mechanical Engineers. Proceedings. Part F: Journal of Rail and Rapid Transit. Vol. 232, No.2, pp. 408–420. <https://doi.org/10.1177/0954409716671548>
22. Soleimani Garmabaki, Ahmadi, A., Block, J., Pham, H., & Kumar, U. (2016), A Decision Framework for Reliability Model Selection of Multiple Repairable Units. Reliability Engineering & System Safety. Vol. 150, pp. 78–88. <https://doi.org/10.1016/j.res.2016.01.020>
23. Murthy DNP, Karim MR, Ahmadi A. (2015), Data management in maintenance outsourcing. Reliability Engineering & System Safety, Vol. 142, pp.100-110. <https://doi.org/10.1016/j.res.2015.05.002>
24. Ahmadi, A., Amir.H S.Garmabaki, Behzad Ghodrati and Uday Kumar, (2015), Optimum inspection interval for hidden functions during extended life. International Journal of COMADEM, Vol. 18, No. 3, pp. 45-49. <http://itu.diva-portal.org/smash/get/diva2:975561/FULLTEXT01.pdf>
25. Soleimani Garmabaki, A., Ahmadi, A. & Mahmood, Y., Barabadi, A. (2015), Reliability Modeling of Multiple Repairable Units. Journal of Quality and Reliability Engineering International. <https://doi.org/10.1002/qre.1938>
26. Mahmood, Y.A., Ahmadi, A., Verma, A.K. (2014), Evaluation and Selection for Availability Improvement of Frequency Converters in Electrified Railway. International Journal of Power and Energy Systems, Vol. 34, No. 4., pp. 162-172. DOI: 10.2316/Journal.203.2014.4.203-0108
27. Al-Chalabi H, Lundberg J, Ahmadi A, Jonsson A. (2015), Case study: model for economic lifetime of drilling machines in the Swedish mining industry. The Engineering Economist. Vol. 60, pp. 138-54. <https://doi.org/10.1080/0013791X.2014.952466>
28. Al-Chalabi HS, Lundberg J, Al-Gburi M, Ahmadi A, Ghodrati B. (2015), Model for economic replacement time of mining production rigs including redundant rig costs. Journal of Quality in Maintenance Engineering, Vol. 21, No. 2, pp. 207-226. <https://doi.org/10.1108/JQME-07-2014-0041>
29. Mahmood, Y.A., Ahmadi, A., Verma, A.K. (2013), Identification of Frequency Converter Models for Availability Improvement. International Journal of Electrical Engineering, Vol. 20, No. 4, pp. 159-170.
30. Mahmood, Y.A.; Ahmadi, A.; Verma, A.K.; Karim, R.; Kumar, U. (2013), Availability and Reliability Performance Analysis of Traction Frequency Converters – a case study. International Review of Electrical Engineering, Vol. 8, No. 4, pp. 1231-1242. <https://www.praiseworthyprize.org/jsm/index.php?journal=iree&page=article&op=view&path%5B%5D=12842>
3. Block, J., Ahmadi, A., Tyrberg, T. Söderholm, P. (2014) Part-out-based Spares Provisioning Management: A Military Aviation Maintenance Case Study. International Journal of Quality in Maintenance Engineering. Vol.20, No. 1, pp. 76-95. <https://doi.org/10.1108/JQME-09-2013-0060>

32. Block, J., Ahmadi, A., Tyrberg, T. and Kumar, U. (2014) Fleet-level Reliability of Multiple Repairable Units: a Parametric Approach using the Power Law Process. *International Journal of Performability Engineering*, Vol. 10, No. 3, pp. 239-250. <http://www.ijpe-online.com/EN/10.23940/ijpe.14.3.p239.mag>
33. Block, J., Ahmadi, A., Tyrberg, T. and Kumar, U. (2013) Fleet-level Reliability Analysis of Repairable Units: A non-Parametric Approach using the Mean Cumulative Function. *International Journal of Performability Engineering*. Vol. 9, No. 3, pp. 335-346. <http://www.ijpe-online.com/EN/10.23940/ijpe.13.3.p333.mag>
34. Gupta, S., Rahber, A., Ahmadi, A. and Kumar, U. (2013), A vector dissimilarity based approach for multi-criteria decision making. *International Journal of System Assurance Engineering and Management*, Vol. 4, No. 3, pp. 249-261.
35. Mahmoud Y.A., Ahmadi A., Verma A. K., Srividya, A., Kumar, U. (2013) Fuzzy Fault Tree Analysis: A Review of Concept and Application. *International Journal of Systems Assurance Engineering and Management*, Vol. 4, No. 1, pp. 19-32. <https://link.springer.com/article/10.1007/s13198-013-0145-x>
36. Garmabaki, A.H. S., Ahmadi, A., Kapur, P. K., Kumar, U. (2013) Predicting Software Reliability in a Fuzzy Field Environment. *International Journal of Reliability, Quality and Safety Engineering*, Vol. 20, No. 3, No. 3, ID 13400019. <https://doi.org/10.1142/S0218539313400019>
37. Hoseini, S. H., Ahmadi, A., Ghodrati, B., and Kumar, U. (2013) Reliability-Centered Maintenance for Spray Jets of Coal Shearer Machine. *International Journal of Reliability, Quality and Safety Engineering*, Vol. 20, No. 3, ID No. 1340006. <https://doi.org/10.1142/S0218539313400068>
38. Ghodrati, B., Ahmadi, A., and Galar, D. (2013) Spare Parts Estimation for Machin Availability Improvement Addressing its Reliability and Operating Environment– Case Study. *International Journal of Reliability, Quality and Safety Engineering*, Vol. 20, No. 3, ID No. 1340005, 15 pp. <https://doi.org/10.1142/S0218539313400056>
39. Ahmadi A., Gupta S., Ghodrati, B., Galar, D. (2012), Estimation of Economic Consequences of Aircraft System Failures. *Communications in Dependability and Quality Management, An International Journal*. Vol. 15, No. 1, pp. 39-49.
40. Ghodrati, B., Markeset, T., Ahmadi, A. and Kumar, U. (2011), Enhancement of Mining Machinery Performance through Supportability. *International Journal of COMADEM*, Vol. 14, No. 2, pp. 35-43. <http://www.comadem.com/journal/past-issues/>
4. Ahmadi, A., Arasteh-Khouy, I., Kumar, U. and Schunnesson, H. (2009), Selection of maintenance strategy, using analytical hierarchy process. *Communications in Dependability and Quality Management*, Vol. 12, No. 1, pp. 121-132.
42. Ahmadi, A. and Kumar, U. (2011), Cost based risk analysis to identify inspection and restoration intervals of hidden failures subject to aging. *IEEE Transaction on Reliability*, Vol. 60, No. 1, pp. 197-209. <https://ieeexplore.ieee.org/document/5703163>
43. Ahmadi, A., Söderholm, P. and Kumar, U. (2010), On aircraft maintenance programme development. *Journal of Quality in Maintenance Engineering*,

	<p>Vol. 16, No. 3, pp. 229-255.  <a href="https://www.emerald.com/insight/content/doi/10.1108/13552511011072899/full/html">https://www.emerald.com/insight/content/doi/10.1108/13552511011072899/full/html</a></p> <p>44. Ahmadi, A., Gupta, S., Karim, R. and Kumar, U. (2010), Selection of Maintenance Strategy for Aircraft Systems Using Multi-Criteria Decision Making Methodologies. <i>International Journal of Reliability, Quality and Safety Engineering</i>, Vol. 17, No. 3, pp. 223-243.  <a href="https://doi.org/10.1142/S0218539310003779">https://doi.org/10.1142/S0218539310003779</a></p> <p>45. Ahmadi, A., Kumar, U. and Söderholm, P. (2010), Operational Risk of Aircraft System Failure. <i>International Journal of Performability Engineering</i>, Vol. 6, No. 2, pp. 149-158. <a href="http://www.ijpe-online.com/EN/10.23940/ijpe.10.2.p149.mag">http://www.ijpe-online.com/EN/10.23940/ijpe.10.2.p149.mag</a></p> <p><b>Edited Book/Proceeding/Special issues:</b></p> <ul style="list-style-type: none"> <li>• Karim, A., Ahmadi, A., Soleimanmeigouni I., and Rao, R. (2016) <i>International Congress and Workshop on Industrial AI 2021. (Lecture notes in mechanical engineering)</i>. Springer International Publishing, Switzerland. DOI: 10.1007/978-3-319-23597-4, ISBN: 9783319235967.  <a href="https://www.springer.com/gp/book/9783319235967">https://www.springer.com/gp/book/9783319235967</a></li> <li>• Kumar, U., Ahmadi, A., Verma, A.K., Varde, P. (2016) <i>Current Trends in Reliability, Availability, Maintainability and Safety: An Industry Perspective. (Lecture notes in mechanical engineering)</i>. Springer International Publishing, Switzerland. DOI: 10.1007/978-3-319-23597-4, ISBN: 9783319235967.  <a href="https://www.springer.com/gp/book/9783319235967">https://www.springer.com/gp/book/9783319235967</a></li> <li>• Pourgol-Mohammad, M. and Ahmadi, A. (2017), Special issue of "IREC2016 conference selected papers." <i>International Journal of System Assurance Engineering and Management</i> 8(3): 529-531.  <a href="https://doi.org/10.1007/s13198-017-0662-0">https://doi.org/10.1007/s13198-017-0662-0</a></li> <li>• Larsson Kråik, P.O, and Ahmadi, A. (2019), "Proceeding of the "International Heavy Haul Conference", Narvik, Norway. International Heavy Haul Association (IHHA), Virginia, USA. ISBN: 9780911382709. (Digital copy is available on request)</li> </ul>
<p><b>Paper Presentations at Professional Conferences:</b></p>	<ol style="list-style-type: none"> <li>1. Khosravi, M., Ahmadi, A. and Kasraei, A, (2023) "Assessment of preventive and corrective tamping recovery", IHHA conference, Rio de Janeiro, Brazil.</li> <li>2. Khosravi, M., Soleimanmeigouni, I., Ahmadi, A., Nissen, A., Haddadzade, M., and Khajehei, H., (2023) 'Track geometry measurements alignment: a relative position-based method'. 30th European Safety and Reliability Conference, United Kingdom.</li> <li>3. Khosravi, M., Ahmadi, A. and Kasraei, A, (2023) "Pre-processing of Track Geometry Measurements: a Comparative Case Study", Industrial AI conference, Sweden.</li> <li>4. Khosravi, M., Ahmadi, A. and Kasraei, A, (2023) "Improving reliability assessment of degrading linear assets by aligning inspection measurement", ICRARE conference, Tehran. Iran.</li> </ol>

5. Khosravi, M., Ahmadi, A. and Kasraei, A, (2023) "Enhancement of Track Geometry Data Quality for Reliability Analysis", ESREL conference (Accepted)
6. Khajehei, H., Soleimanmeigouni, I., Ahmadi, A, Nisse A., Haddadzade,M. (2020), Application of first-and second-order derivatives of track irregularity to plan local maintenance activities, Proceedings of the 30th European Safety and Reliability Conference
7. Khosravi, M., Soleimanmeigouni, I., Ahmadi, A, Nisse A., Haddadzade,M. (2020), Track Geometry Measurements Alignment: A Comparative Study of Three Relative Position-Based Methods
8. Haddadzade, M., Khajehei, H., Ahmadi, A., and Soleimanmeigouni, I. (2019), Application of artificial neural network for prediction of track geometry degradation. International Heavy Haul STS Conference.
9. Khajehei, H., Ahmadi, A., Soleimanmeigouni, I., Haddadzade, M., and Arne Nisse (2019), Application of principal component analysis and artificial neural network in prediction of track geometry degradation, In Proceedings of 5th international workshop and congress on eMaintenance, Stockholm, Sweden, pp.63-37.
10. Khajehei, H., Ahmadi, A., Haddadzade, M., Soleimanmeigouni, I., and Nissen, A. (2019) 'Application of artificial neural network for prediction of track geometry degradation'. IHHA conference, Narvik, Norway.
11. Haddadzade, M., Ahmadi, A., Khajehei, H., and Soleimanmeigouni, I. (2019) 'Multi-objective optimization of scheduling of railway track tamping using modified NSGA-II'. IHHA conference, Narvik, Norway.
12. Soleimanmeigouni, I., Ahmadi, A., Khajehei, H., and Nissen, (2019), A. 'Cost effective railway track geometry inspection interval'. IHHA conference, Narvik, Norway.
13. Haddadzade, M., Khajehei, H., Ahmadi, A., Soleimanmeigouni, I., and Nissen, A. (2019) 'Prediction of track geometry degradation by artificial neural networks'. ESREL conference, Hannover, Germany, 22 - 26 September 2019.
14. Khajehei, H., Ahmadi, A., Soleimanmeigouni, I., (2017) " Forecasting Railway Track Geometry Condition Using Neural Network Approach," 5th International Conference on Recent Advances in Railway Engineering, Tehran, Iran, 15-16 May 2017.
15. Soleimanmeigouni, I., Ahmadi, A., Nissen, A., and Arastehkhoy I., (2017), " Evaluation and Prediction of Track Geometry Condition," 5th International Conference on Recent Advances in Railway Engineering, Tehran, Iran, 15-16 May 2017
16. Lopes, J.C.O., Scarpel, R., Abrahão, F, Galar, D.and Ahmadi, A. (2016) Optimization In Performance-Based Logistics Contracts, International Conference on Maintenance Performance Measurement and Management (MPMM), Lulea, Sweden.
17. Ahmadi, A., Soleimanmeigouni, I., Letot, C., and Block, J. (2016) Inspection Optimization under imperfect maintenance performance. International



	<p>Conference on Maintenance Performance Measurement and Management (MPMM), Lulea, Sweden.</p> <p>18. Letot, C., Soleimanmeigouni, I., Arasteh Khouy, I., Ahmadi, A., Dehombreux, P. (2016) Comparaison des processus gamma et Wiener pour modéliser la dégradation de géométrie de voies ferroviaires Auteurs, In proceeding of the 20th Lambda Mu Symposium, France.</p> <p>19. Soleimanmeigouni, I., Ahmadi, A., Letot, C., Nissen, A., Kumar U., (2016) Cost-Based Optimization of Track Geometry Inspection, World Congress on Railway Research, Milan, Italy.</p> <p>20. Letot, C., Soleimanmeigouni, I., Ahmadi, A., Dehombreux, P. (2016), An adaptive opportunistic maintenance model based on railway track condition prediction. IFAC Workshop on Advanced Maintenance Engineering, Service and Technology, Biarritz, France.</p> <p>21. Garmabaki, A.H. S., Ahmadi, A., Mahdavi, I., Ahmadi, M (2015), Reliability modeling of open source software based on adoption behavior under stochastic environment. In proceeding of the 25th annual European Safety and Reliability Conference, Zurich, Switzerland, 7-10 September.</p> <p>22. Minbashi, N, Bagheri, M, Arasteh Khouy, I, Ahmadi, A. (2015), Turnout degradation through modelling and new inspection technologies: a study in the scientific literature. In proceeding of ICRESH-ARMS Conference, Luleå, Sweden.</p> <p>23. Soleimanmeigouni, I. and Ahmadi, A. (2015), A survey on track geometry degradation modeling. In proceeding of ICRESH-ARMS Conference, Luleå, Sweden.</p> <p>24. Garmabaki, A.H. S., Ahmadi, A., and Ahmadi, M. (2015), Maintenance optimization using Multi-Attribute Utility Theory. In proceeding of ICRESH-ARMS Conference, Luleå, Sweden.</p> <p>25. Karim, M.R., Ahmadi A. and Murthy, D.N.P. (2015), Modeling of Maintenance Data. In proceeding of ICRESH-ARMS Conference, Luleå, Sweden.</p> <p>26. Ahmadi, A., and Kumar, U. (2015), RAMS Analysis of Wayside Train Monitoring Systems (WTMS). 18th Nordic Seminar on Railway Technology, Norway, Bergen</p> <p>27. Block, J., Ahmadi, A., Tyrberg, T. (2014), Using Monte Carlo Simulation as Support for Decision Making While Negotiating a PBL Contract. In Proceedings of: IEEE Aerospace conference. March 2014, Montana, USA.</p> <p>28. Garmabaki, A.H. S., Ahmadi, A., and Block, J. (2014), Fleet Level Reliability Estimation of Repairable Units. In proceeding of the 24th annual European Safety and Reliability Conference (ESREL 2014), Wrocklaw, Poland, 14-18 September.</p> <p>29. Ahmadi, A., Ghodrati, B., Garmabaki, A.H. S., and Kumar, U. (2014), Optimum inspection interval for hidden functions during extended life. In proceeding of: The 27th International Congress of Condition Monitoring and Diagnostic Engineering Management (COMADEM 2014), Brisbane, Australia, 16-18 December.</p>
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30. Ghodrati, B., and Ahmadi, A. (2013) Product Support Logistics Based on System Reliability Characteristics and Operating Environment. In proceeding of the IEEE International Conference on Industrial Engineering and Engineering Management (IEEM2013), Bangkok, Thailand, 10-13 December.
31. Mahmoud Y.A., Ahmadi A., Verma A. K. (2013), Identifying the Critical of Frequency Converter Models. In proceeding of the 10th International Conference on Condition Monitoring and Machinery Failure Prevention Technologies BINDT-2013, Kraków, Poland, 17-18 June.
32. Ahmadi, A., Ghodrati B., Rantatalo, M. (2013), Optimum Failure Finding Inspection During Extended Operation Life. In proceeding of the 3rd International Conference on Recent Advances in Railway Engineering (ICRARE), Tehran, Iran, Apr 30- May 1.
33. Ghodrati, B., Ahmadi, A., Galar, D. (2013), Reliability Analysis of Switches and Crossings in Swedish Railway. In proceeding of the 3rd International Conference on Recent Advances in Railway Engineering (ICRARE), Tehran, Iran, Apr 30- May 1.
34. Garmabaki, A.H. S., Ahmadi, A., Kapur, P. K., Kumar, U. (2012), Predicting Software Reliability in a Fuzzy Field Environment. In Proceedings of: International Conference on Quality, Reliability, Infocom Technology and Industrial Technology Management (ICRQI), Delhi, India. Nov. 26-28.
35. Mahmood Y. A., Ahmadi, A., Karim, R., Kumar, U., Verma, A. K., and Fransson, N. (2012), Comparison of Frequency Converter Outages: a case study on the Swedish TPS system. In proceeding of World Academy of Science, Engineering and Technology Conference (WASET), Paris, France, Nov. 28-29, Issue 71.
36. Ahmadi, A. Block, J., and Kumar, U. (2012), Risk Based Maintenance Deferral of Components Subject to Hidden Failure. In proceeding of: the 58th IEEE Annual Reliability and Maintainability Symposium, Nevada, USA, Jan 23-26.
37. Ahmadi, A. , Kumar, U. and Ghodrati, B. (2010), Risk based maintenance decision for periodically tested repairable components subject to hidden failure. In Proceedings of 2nd International Conference on Reliability, Safety and Hazard - ICRESH 2010: Mumbai, India, Dec 15-16, pp. 197-205.
38. Ahmadi, A., Karim, R. and Barabardy, J. (2010), Prerequisites for a Business-oriented Fleet Availability Assurance Program in Aviation. In Proceedings of 1st international workshop and congress on eMaintenance, Luleå, Sweden, June 22-24, pp.168-175.
39. Ahmadi, A., Franson, T., Crona, A., Klein, M. and Söderholm, P. (2009), Integration of RCM and PHM for the next generation of aircraft. In Proceedings of: IEEE Aerospace conference. March 7-14, Montana, USA.
40. Ahmadi, A. and Söderholm, P. (2008), Assessment of the operational consequences of aircraft failures: Using Event Tree Analysis. In Proceedings of: IEEE Aerospace Conference. March 1-8, Montana, USA.
41. Ahmadi, A., Gupta, S. and Kumar, U. (2007), Assessment of the cost of operational consequences of failures in aircraft operation. In Proceedings of: 3rd International Conference on Reliability and Safety. December 17-19, Udaipur, India.

	42.Ahmadi, A., Söderholm, P. and Kumar, U. (2007), An Overview of Trends in Aircraft Maintenance Program Development: Past, Present, and Future. In Proceedings of: European Safety and Reliability Conference (ESREL), June 25-27, Stavanger, Norway.
<b>College Service including committee Membership:</b>	NA
<b>National Service:</b>	NA
<b>College Committees:</b>	NA