### Publications

Reza Ahmadi

### **Journal Articles**

- 1. **R. Ahmadi and M. Fouladirad**, *Maintenance planning for a deteriorating production process*. To appear in Reliability Engineering and System Safety.
- 2. R. Ahmadi, An Optimal Replacement Policy for Complex Multi-Component Systems. Int. J. Production Research, 2016; 54(17).
- R. Ahmadi, A Probabilistic Model for Maintaining and Optimizing the Life-Cycle Performance of Deteriorating Structures. To appear in Int. J. Operational Research, 2015 [21 pages].
- 4. **R. Ahmadi**, *Scheduling Preventive Maintenance for a Non-periodically Inspected Deteriorating system*. Int. J. Rel. Qual. Saf. Eng., 2015; 22(6) [40 pages].
- 5. R. Ahmadi, A New Approach to Modeling Condition-Based Maintenance for Stochastically Deteriorating Systems. Int. J. Rel. Qual. Saf. Eng., 2014; 21(5) [25 pages].
- 6. **R. Ahmadi,** *Optimal Maintenance Scheduling for a Complex Manufacturing System Subject to Deterioration.* Annals of Operations Research; 2014; 217(1): pp. 1-29.
- 7. R. Ahmadi and M.J. Newby, *Maintenance Scheduling of a Manufacturing System Subject to Deterioration*. Reliability Engineering and System Safety; 2011; 96(10): pp. 1411-1420.

## **Submitted and Working Papers**

- 1. R. Ahmadi and S. Wu, A novel data-driven approach to optimizing replacement policy.
- 2. R. Ahmadi, An optimal Replacement policy based on an estimated Markov-modulated reward model.

## Papers in Refereed Conference Proceedings

- R. Ahmadi, Maintenance Scheduling of a Manufacturing System Subject to Linear Deterioration Model. Proceedings of the 18th ISSAT International Conference on Reliability and Quality in Design; Boston, MA; United States; 26 July 2012 through 28 July 2012; Pages 355-363; ISBN: 978-097634868-9.
- R. Ahmadi and M.J. Newby, An Optimal Preventive Maintenance Policy of a Deteriorating System Subject to a Bivariate State Process. Advances in Safety, Reliability and Risk Management. Taylor and Francis Group, London, 2011, 810-818, ISBN: 978-0-415-68379-1, DOI: 101201/b11433-115.

# Chapters in Books

 R. Ahmadi and M.J. Newby, A New Approach to Maintenance Optimization by Modeling Intensity Control. Mathematical and Statistical Models in Reliability, Statistics for Industry and Technology, Part 1, 69-85, DOI: 10.1007/978-0-8176-497-5\_5, (2010).

### **Invited Presentations (Seminars and Conferences)**

1. **R. Ahmadi,** A degradation-based replacement policy for complex multi-component systems. 6st International Conference on Accelerated Life Testing and Degradation Models. 22-24 June 2016, Troyes, France.

- 2. R. Ahmadi, A Preventive Maintenance Model for Periodically Inspected Deteriorating systems. 1st National Seminar on Reliability Theory and Its Application. Isfahan University, Iran. May 27-28, 2015.
- 3. R. Ahmadi, A New Approach to Modeling Condition-Based Maintenance for Stochastically Deteriorating Systems. Accepted for presentation at INFORMS Applied Probability Society Conference 2013, Costa Rica.
- R. Ahmadi and M.J. Newby, A Semi-Parametric Approach to Maintenance Optimization. 6<sup>th</sup> International Conference on Mathematical Methods in Reliability (MMR). The Russian State University of Oil and Gas, Moscow. Russia. June 22-26, 2009.
- 5. **R. Ahmadi**, *Optimal Replacement Policy of Repairable Systems*. 3<sup>rd</sup> Conference on Maintenance and Repair. Tehran, Iran. September 12-13, 2005.
- R. Ahmadi, Repair and Maintenance Models of Systems Subject to Shock Processes. 5<sup>th</sup> Seminar on Probability and Stochastic Processes. Birjand University, Iran. August, 24-25, 2005.
- 7. R. Ahmadi, *Regression Models with Proportional Hazards*. 3<sup>rd</sup> Student Seminar on Probability and Statistics. Ferdosi University of Mashhad, Iran. August 19-21, 2004.