

PUBLICATIONS

Journal Papers

Published (* corresponding author)

Reliability Assessment of Components and Systems

1. **Y.F. Li**, R. Peng. 2014. Availability Modeling and Optimization of Dynamic Multi-State Series-Parallel Systems with Random Reconfiguration. *Reliability Engineering & System Safety* (accepted).
2. **Y.F. Li***, Y. Ding, E. Zio. 2014. Random Fuzzy Extension of the Universal Generating Function Approach for the Reliability Assessment of Multi-State Systems under Aleatory and Epistemic Uncertainties. *IEEE Transactions on Reliability*. 63(1), 13 - 25.
3. Z. Yang, Y.X. Chen, **Y.F. Li**, E. Zio, R. Kang. 2014. Smart Electricity Meter Reliability Prediction based on Accelerated Degradation Testing and Modeling. *International Journal of Electrical Power & Energy Systems*. 56, 209-219.
4. R. Peng, **Y.F. Li**, W.J. Zhang, Q.P. Hu. 2014. Testing effort dependent software reliability model for imperfect debugging process considering both detection and correction. *Reliability Engineering & System Safety* 126, 37–43.
5. R. Peng, **Y.F. Li***, J.G. Zhang, X. Li. 2014. A risk-reduction approach for optimal software release time determination with the delay penalty cost. *International Journal on Systems Science*. (In press).
6. **Y.F. Li***, E. Zio, Y.H. Lin. 2012. A Multi-state Physics Model of Component Degradation based on Stochastic Petri Nets and Simulation. *IEEE Transactions on Reliability*. 61(4), 921-931.
7. **Y.F. Li***, E. Zio. 2012. A Multi-State Model for the Reliability Assessment of a Distributed Generation System via Universal Generating Function. *Reliability Engineering & Systems Safety*. 106, 28–36.
8. **Y.F. Li***, E. Zio. 2012. Uncertainty Analysis of the Adequacy Assessment Model of a Distributed Generation System. *Renewable Energy*. 41, 235-244.
9. Y. Ding, E. Zio, **Y.F. Li**, L. Cheng, Q. W. Wu. 2012. Definition of Multi-state Weighted k-out-of-n: F Systems. *International Journal of Performability Engineering*. 8(2), 217-219.
10. Y.S. Dai, Y.P. Xiang, **Y.F. Li**, L.D. Xing. 2011. Consequence Oriented Self-Healing and Autonomous Diagnosis for Highly Reliable Systems and Software. *IEEE Transactions on Reliability*. 60(2), 369 – 380.
11. X. Li, **Y.F. Li**, M. Xie, S.H. Ng. 2011. Reliability analysis and optimal version-updating for open source software. *Information and Software Technology*. 53(9), 929-936.

Optimization and Prediction

12. **Y.F. Li***, N. Pedroni, E. Zio. 2013. A Memetic Evolutionary Multi-Objective Optimization Method for Environmental Power Unit Commitment. *IEEE Transactions on Power Systems*. 28(3), 2660 – 2669.

13. E. Kuznetsova, **Y.F. Li**, C.R. Mora, E. Zio, G. Ault, K. Bell. 2013. Reinforcement learning for microgrid energy management. *Energy*. 59, 133–146.
14. **Y.F. Li***, G. Sansavini, E. Zio. 2013. Non-Dominated Sorting Binary Differential Evolution for the Multi-Objective Optimization of Cascading Failures Protection in Complex Networks. *Reliability Engineering & System Safety*. 111, 195–205.
15. R. Ak, **Y.F. Li.**, V. Vitelli, E. Zio, E. L. Droguette, C. M. C. Jacintod. 2013. NSGA-II-Trained Neural Network Approach to the Estimation of Prediction Intervals of Scale Deposition Rate in Oil & Gas Equipment. *Expert Systems with Applications*. 40(4), 1205-1212.
16. **Y.F. Li***, M. Xie, T.N. Goh. 2011. Estimating Software Project Cost on Multi-Collinear Datasets Using Ridge Regression. *Journal of Systems and Software*. 83(11), 2332-2343.
17. **Y.F. Li***, S.H. Ng, M. Xie, T.N. Goh. 2010. A Systematic Comparison of Metamodeling Techniques for Simulation Optimization in Decision Support Systems. *Applied Soft Computing*. 10, 1257-1273.
18. **Y.F. Li***, M. Xie, T.N. Goh. 2009. A Study of the Non-linear Adjustment for Analogy Based Software Cost Estimation. *Empirical Software Engineering*. 14(6), 603-643.
19. **Y.F. Li***, M. Xie, T.N. Goh. 2009. A Study of Mutual Information Based Feature Selection for Case Based Reasoning in Software Cost Estimation. *Expert Systems with Applications*. 36(3), 5921-5931.
20. **Y.F. Li***, M. Xie, T.N. Goh. 2009. A Study of Project Selection and Feature Weighting for Analogy Based Software Cost Estimation. *Journal of Systems and Software*. 82(2), 241-252. (**Best Student Paper Award, IEEE TMC, Singapore Chapter**)

Book Chapters

1. **Y.F. Li**, E. Zio, Y.H. Lin. 2012. Methods of Solutions of Inhomogeneous Continuous Time Markov Chains for Degradation Process Modeling, Applied Reliability Engineering and Risk Analysis. Probabilistic Models and Statistical Inference. Dedicated to the Centennial of the birth of Boris Gnedenko, renowned Russian mathematician and reliability theorist. ed. Alex Karagrigoriou, Anatoly Lisnianski, Andre Kleyner, Ilia Frenkel. Wiley.
2. C.J. Xiong, **Y.F. Li**, M. Xie, S.H. Ng, T.N. Goh. 2009. Service Reliability and Availability Analysis of Distributed Software Systems Considering Malware Attack, in *Advances in Software Engineering*, vol. 36 of *Communications in Computer and Information Science*. Springer Berlin Heidelberg. Page: 313-320. ISSN: 1865-0929. (ISTP)
3. **Y.F. Li**, J. Liu. 2005 Predicting Subcellular Localization of Proteins Using Support Vector Machine with N-Terminal Amino Composition. in *Advanced Data Mining and Applications*, vol. 3584 of *Lecture Notes in Computer Science*. Springer Berlin Heidelberg, Page: 618-625. ISSN: 0302-9743. (ISTP)

Conference Proceedings

1. H.L. Zhang, **Y.F. Li**. 2014. Multi-Objective Design and Maintenance Optimization of the Heated Hold-Up Tank. *Lambda Mu 19*, Dijon, France, 21-23, Oct, 2014.
2. Y.H. Lin, **Y.F. Li**, E. Zio. 2014. Modeling Multiple Dependent Competing Degradations under

Epistemic Uncertainty via Piecewise Deterministic Markov Process. *Lambda Mu 19*, Dijon, France, 21-23, Oct, 2014.

3. M.M. Zhang, **Y.F. Li**, M. Xie. 2014. Maintenance Modeling for a Multistate Component in a Safety-critical System. *Proceedings of the Industrial Engineering Research Conference (ISERC) 2014*.
4. **Y.F. Li**, Y. Ding, E. Zio. 2013. Hybrid Universal Generating Function for the Reliability Assessment of Multi-State Systems under Aleatory and Epistemic Uncertainties. *ESREL 2013*. Amsterdam, Netherland, 30 Sep. –3 Oct., 2013.
5. R. Ak, **Y.F. Li**, V. Vitelli, E. Zio. 2013. A Genetic Algorithm-and-Neural Network Technique for Predicting Wind Power under Uncertainty. *PHM 2013*. Milan, Italy, 8-11 Sep., 2013.
6. Y.H. Lin, **Y.F. Li**, E. Zio. 2013. Multi-State Physics Model for the Reliability Assessment of a Component under Degradation Processes and Random Shocks. *ESREL 2013*. Amsterdam, Netherland, 30 Sep. – 3 Oct., 2013.
7. R. Mena, **Y.F. Li**, M. Hennebel, C. Ruiz, E. Zio. 2013. Optimal sizing and allocation of distributed generation for reliable energy distribution accounting for uncertainty. *ESREL 2013*. Amsterdam, Netherland, 30 Sep. – 3 Oct., 2013.
8. E. Kuznetsova, C. Ruiz, **Y.F. Li**, E. Zio. 2013. Reliable microgrid energy management under environmental uncertainty and mechanical failures: an agent-based modelling and robust optimization approach. *ESREL 2013*. Amsterdam, Netherland, 30 Sep. – 3 Oct., 2013.
9. **Y.F. Li**, E. Zio, Y.H. Lin, A. Despujols. 2012. Un cadre de simulation multi-etats pour modéliser la dégradation des composants de systemes de production d'énergie. *Lambda Mu 18*, Tours, France, 16-18, Oct, 2012.
10. R. Ak, **Y.F. Li**, V. Vitelli, E. Zio. 2012. Estimation of wind speed prediction intervals by multi-objective genetic algorithms and neural networks. *Acts of the XLVI Scientific Meeting of the Italian Statistical Society (SIS 2012)*, Rome, Italy, 20-22 June 2012 (pp. 1-4).
11. R. Ak, **Y.F. Li**, E. Zio. 2012. Estimation of Prediction Intervals of Neural Network Models by a Multi-objective Genetic Algorithm. *FLINS 2012*, Istanbul, Turkey, August 26-29, 2012.
12. C.T. Lin, **Y.F. Li**, C.D. Chen. 2012. Rate-Based Queueing Simulation Models of Open Source Software Debugging Activities. *EURO workshop on Stochastic Modelling*, 2012, Paris, France, 30 May – 1 June, 2012.
13. R. Mena, C. Ruiz, **Y.F. Li**, E. Zio. 2012. Simulation and Optimization of Renewable Generators Allocation in a Distribution Network, *Infirms Annual Meeting*, October 14-17 2012, Phoenix, AZ, USA.
14. C. Ruiz, **Y.F. Li**, R. Mena, E. Zio. 2012. Robust Reliability Optimization by System Design and Components Allocation, *Infirms Annual Meeting*, October 14-17 2012, Phoenix, AZ, USA.
15. **Y.F. Li**, Y. H. Lin, E. Zio. 2012. Stochastic Modeling by Inhomogeneous Continuous Time Markov Chains. *EURO workshop on Stochastic Modelling*, 2012, Paris, France, 30 May – 1 June, 2012.
16. **Y.F. Li**, M. Kumar, E. Zio. 2012. Petri-Net Simulation Model of a Nuclear Component Degradation

Process. *PSAM11 & ESREL 2012*. Helsinki, June 2012 (pp. 1-10).

17. **Y.F. Li**, E. Zio, G. Sansavini, L.R. Golea. 2012. A Multi-Objective Memetic Optimization Method for Power Network Cascading Failures Protection. *PSAM11 & ESREL 2012*, Helsinki, June 2012 (pp. 1-10).
18. E. Kuznetsova, **Y.F. Li**, K Culver. E. Zio. 2011. Generic simulation model for adequacy assessment of distributed generation. *Complex Systems Design & Management (CSDM) 2011*, Paris, France
19. L. Marella, R. Sawhney, **Y.F. Li**, E. Iwuchukwu. Hybrid Decision Support System and RFID Technology for Intelligent and Speedy Facility Maintenance. *Proceedings of Reliability and Maintainability: The Pathway to Excellence, 2011*.
20. S. Faghihroohi, **Y.F. Li**, M. Xie. 2010. Time-To-State and Availability Assessment of Multi-state Weighted K-out-of-N: G Systems. *Proceedings of the IEEE International Conference on Industrial Engineering and Engineering Management (IEEM 2010)*.
21. C. J. Xiong, **Y.F. Li**, M. Xie, S.H. Ng. 2009. A Model of Open Source Software Maintenance Activities. *Proceedings of the IEEE International Conference on Industrial Engineering and Engineering Management (IEEM 2009)*, 267-271.
22. H. Xiao, **Y.F. Li**, M. Xie, K.M. Ng, M.S. Habibullah. 2009. A Model for Reliability Analysis of Repairable Transportation Systems. *Proceedings of the Industrial Engineering Research Conference (IERC 2009)*.
23. **Y.F. Li**, M Xie, T.N. Goh. 2008. A Bayesian Inference Approach for Probabilistic Analogy Based Software Maintenance Effort Estimation. *Proceedings of the IEEE Pacific Rim International Symposium on Dependable Computing (PRDC2008)*, 176-183.
24. **Y.F. Li**, M Xie, T.N. Goh. 2008. Optimization of Feature Weights and Number of Neighbors for Analogy Based Cost Estimation in Software Project Management. *Proceedings of the IEEE International Conference on Industrial Engineering and Engineering Management (IEEM 2008)*, 1542-1546.
25. **Y.F. Li**, M Xie, T.N. Goh. 2008. A Study of Analogy Based Sampling for Interval Based Cost Estimation for Software Project Management. *Proceedings of the IEEE International Conference on Management of Innovation and Technology (ICMIT 2008)*, 281-286.
26. **Y.F. Li**, M Xie, T.N. Goh. 2007. A Study of Genetic Algorithm for Project Selection for Analogy Based Software Cost Estimation. *Proceedings of the IEEE International Conference on Industrial Engineering and Engineering Management (IEEM 2007)*, 1256-1260.
27. L.H. Wang, J. Liu, **Y.F. Li**, H.B. Zhou. 2004. Predicting Protein Secondary Structure by a Support Vector Machine Based on a New Coding Scheme. *Proceedings of the 15th International Conference on Genome Informatics (Genome Informatics 2004)*, 181-190.