

Curriculum Vitae

Dr. Vasilis P. Koutras

Assistant Professor (Tenured)

Stochastic Modeling

Department of Financial and Management Engineering,

School of Engineering,

University of the Aegean

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Birth Date: 29/08/78

Assistant Professor (Tenured)

Department of Financial and Management Engineering

School of Engineering, University of the Aegean

Research Interests

Stochastic modeling of highly available and reliable systems. Stochastic modeling of software rejuvenation, computer systems performability indicators, software reliability, Markov and Semi-Markov processes, preventive maintenance, operations research.

Education

- 2005-2010** PhD Diploma, Department of Financial and Management Engineering, University of the Aegean, Chios, Greece. Title of PhD thesis: **Optimizing Performance and Dependability of Computer Systems: Software Rejuvenation Stochastic Modeling.**
- 2002 - 2004** MSc “**Mathematical Modeling in Physical Sciences and New Technologies**”, Department of Mathematics, University of the Aegean, Samos, Greece MSc thesis in System Reliability.
- 1997 - 2002** BSc in **Mathematics**, Department of Mathematics, University of Patras, Greece

Academic Positions

- 12/ 2020 – today** **Assistant Professor (tenured)**
Department of Financial and Management Engineering, University of the Aegean
Teaching:
Operations Research II: AcY. 20-21, 21-22, 22-23
Modelling Analysis and Design of Stochastic Systems: AcY. 20-21, 21-22, 22-23
Statistics: AcY. 20-21, 21-22, 22-23
Stochastic Models: AcY. 20-21, 21-22, 22-23
- 5/ 2017 – 12/2020** **Assistant Professor**
Department of Financial and Management Engineering, University of the Aegean
Teaching:

Operations Research II: AcY. 17-18, 18-19, 19-20

Modelling Analysis and Design of Stochastic Systems: AcY. 17-18, 18-19, 19-20

Statistics: AcY. 17-18, 18-19, 19-20

Stochastic Models: AcY. 17-18, 18-19, 19-20

11/ 2019 – 1/20

Assistant Professor

Department of Financial and Management Engineering, University of the Aegean,
Postgraduate Program in Financial & Management Engineering

Teaching:

Operations Research (Lectures)

7/ 2014 – 5/2017

Lecturer

Department of Financial and Management Engineering, University of the Aegean
Teaching:

Operations Research II: AcY. 14-15, 15-16, 16-17, 17-18

Modelling Analysis and Design of Stochastic Systems: AcY. 14-15, 15-16, 17-18

Statistics: AcY. 14-15, 15-16, 16-17, 17-18

Stochastic Models: AcY. 14-15, 15-16, 16-17, 17-18

10/ 2005 – 7/ 2014

(1) Adjunct Faculty Member

Department of Financial and Management Engineering, University of the Aegean

Teaching:

Operations Research II: AcY. 05-06*, 06-07*, 07-08*, 08-09*, 09-10*, 10-11, 11-12, 12-13,
13-14, 14-15, 15-16

Modelling Analysis and Design of Stochastic Systems: AcY. 12-13, 13-14, 14-15, 15-16

Statistics: AcY. 10-11, 11-12, 12-13, 13-14, 14-15, 15-16

Stochastic Models: AcY. 10-11, 11-12, 12-13, 13-14, 14-15, 15-16

System Reliability: AcY. 13-14

Queueing Theory: AcY. 10-11

Probability Model LAB*: AcY. 06-07, 07-08, 08-09, 09-10

Statistics LAB: AcY. 06-07, 07-08, 08-09, 09-10

* under the supervision of Associate Professor A.N. Platis

(2). Research Associate in Postgraduate Program: Economics and Management for Engineers, Department of Financial and Management Engineering, University of the Aegean

Seminar in Statistics: AcY. 06-07, 07-08, 11-12, 12-13, 13-14, 14-15, 15-16, 16-17, 17-18

10/2022 – today

Hellenic Open University

School of Science & Technology

Academic Staff, PostGraduate Programme: **Data Science and Machine Learning (DAMA),**

Course: **DAMA 50 Mathematics for Machine Learning**

10/2019– 7/2020

Hellenic Open University

- School of Science & Technology**
Academic Staff, PostGraduate Programme: **Quality Management and Technology Msc**,
Course: **DIP50 Basic Tools and Methods for Quality Control**
- 10/2018– 7/2019** **Hellenic Open University**
School of Science & Technology
Academic Staff, PostGraduate Programme: **Quality Management and Technology Msc**,
Course: **DIP50 Basic Tools and Methods for Quality Control**
- 10/2017– 7/2018** **Hellenic Open University**
School of Science & Technology
Academic Staff, PostGraduate Programme: **Quality Management and Technology Msc**,
Course: **DIP50 Basic Tools and Methods for Quality Control**
- 10/2016– 7/2017** **Hellenic Open University**
School of Science & Technology
Academic Staff, PostGraduate Programme: **Quality Management and Technology Msc**,
Course: **DIP61 Special Topics on Quality**
- 10/2015– 7/2016** **Hellenic Open University**
School of Science & Technology
Academic Staff, PostGraduate Programme: **Quality Assurance Msc**,
Course: **DIP50 Basic Tools and Methods for Quality Control**
- 10/2013– 7/2014** **Hellenic Open University**
School of Science & Technology
Academic Staff, PostGraduate Programme: **Quality Assurance Msc**,
Course: **DIP50 Basic Tools and Methods for Quality Control**
- 10/ 2009– 7/2018** Member of the **Reliability Engineering Laboratory (REL)**, **Department of Financial and Management Engineering**, University of the Aegean

Research Activity

- 11/2015 – 7/ 2016** **Researcher** (Department of Financial and Management Engineering, University of the Aegean, RELab) *in European Funding Project:*

‘PREPAREDNESS AND PREVENTION PROJECTS IN CIVIL PROTECTION AND MARINE POLLUTION’ – EUROPEAN COMMISSION – DG ECHO:

An Integrated Methodological framework for Emergency Logistics (MELOGIC)

DG Humanitarian and Civil Protection (DG ECHO), ECHO/SUB/2014/695769, *co-financed: 75% by the European Commission (DGECHO), 25% by Own Resources (ECHO/SUB/2014/695769).*
- 3/2012 – 9/ 2015** **Researcher** (Department of Financial and Management Engineering, University of the Aegean, RELab) *in European Funding Project:*

THALES: “Analysis of Supply and Production Systems: an Integrated Approach” (ASPASIA), *co-financed by the European Union (European Social Fund – ESF) and Greek national funds through the Operational Program "Education and Lifelong Learning" of the National Strategic Reference Framework (NSRF) - Research Funding Program: Thales. Investing in knowledge society through the European Social Fund*

PhD Supervision

1. Supervisor: **I. Mitrofani PhD Thesi. Title: Stochastic modeling of epidemiological phenomena based on Branching Processes**, Department of Financial and Management engineering, School of Engineering, University of the Aegean (*2022-today*).

PhD Advisory Comitee

1. Advisory Comitee: **A. Gialos PhD Thesis. Title: Evaluation of vision picking technology performance by configuring system design and order picking parameters**, Department of Financial and Management engineering, School of Engineering, University of the Aegean (*2020-today*).
2. Advisory Comitee: **E.Karampotsis PhD Thesis. Title: Medical Decision Making using Intelligent Data Analysis Methods**, Department of Financial and Management engineering, School of Engineering, University of the Aegean (*2019-today*).
3. Advisory Comitee: **P. Psomas PhD Thesis. Title: Prognostics and Health Management of Renewable Energy System**, Department of Financial and Management engineering, School of Engineering, University of the Aegean (*2019-today*).
4. Advisory Comitee: **T. Markopoulos PhD Thesis. Title: Reliability Analysis of Multi-State Systems: A Case Study on Maritime Application**, Department of Financial and Management engineering, School of Engineering, University of the Aegean (*2019-today*).

MRes Supervision

1. Supervisor: **E. Athanasiadis, Master by Research. Title: Modeling and optimization of routing and scheduling of delivery trucks and unmanned aircrafts in tandem, and charging station location selection for last-mile delivery**, Department of Financial and Management engineering, School of Engineering, University of the Aegean (*2022-today*).
2. Supervisor: **A. Kadrefi, Master by Research. Title: Stochastic Modeling and Optimization of Resource Availability in Multiple Parking Lots**, Department of Financial and Management engineering, School of Engineering, University of the Aegean, 2021.
3. Supervisor: **I. Mitrofani, Master by Research. Title: Branching Processes**, Department of Financial and Management engineering, School of Engineering, University of the Aegean, 2021.

Theses Supervision

University of the Aegean

1. C. Gika, “*Markov Models for Covid-19 Survival Analysis in Greece*”, Department of Financial and Management Engineering, University of the Aegean, July 2022
2. D. Mavrogenni, “*Stochastic Modeling of the performance of software rejuvenation models using semi-Markov processes*”, Department of Financial and Management Engineering, University of the Aegean, July 2022.
3. E. Athanasiadis, “*Modelling opportunistic maintenance and reliability analysis on a two-unit multi-state system in series*”, Department of Financial and Management Engineering, University of the Aegean, January 2022. *Note: Co-supervising with V. Zeimpekis.*
4. N. Thomaidis, “*Evaluation of operational parameters that affect the order picking performance in a warehouse: A Design of Experiments Approach*”. Department of Financial and Management Engineering, University of the Aegean, September 2021. *Note: Co-supervising with V. Zeimpekis.*

5. Z. Paragyiou, "**Modelling opportunistic maintenance and reliability analysis on a two-unit multi-state system in series**", Department of Financial and Management Engineering, University of the Aegean, June 2021.
6. N. Petropoulou, "**An approach for Financial Risk Management by Using Hidden Markov Models**", Department of Financial and Management Engineering, University of the Aegean, January 2021.
7. A. Soulis, "**An approach for an integrated strategy on vehicle routing and maintenance**", Department of Financial and Management Engineering, University of the Aegean, July 2020.
8. G. Mourtzos, "**Stochastic Modeling and Availability and Performance Optimization of k-out-of-n Systems with Multi-State Deteriorating Units under Maintenance**", Department of Financial and Management Engineering, University of the Aegean, February 2020.
9. T.T.M. Saltidis, "**Stochastic Modeling of a Standby System with Two Non-Identical Units**", Department of Financial and Management Engineering, University of the Aegean, January 2020.
10. K. Kaoua, "**Modeling and Reliability Analysis of Multi-State Systems with Repairable Standby Elements**", Department of Financial and Management Engineering, University of the Aegean, January 2020.
11. M. Apostolidou, "**Markov models as a tool for estimating credit migration matrices for Greek economy**", Department of Financial and Management Engineering, University of the Aegean, June 2019.
12. A. Chrysikos, "**A methodology for portfolio selection based on Markov Processes. Case Study: The banking sector in the South European countries**", Department of Financial and Management Engineering, University of the Aegean, September 2018.
13. M. Panagi, "**Modeling and Optimization of Two-Level Software Rejuvenation Policies Based on Geometric Sequences**", Department of Financial and Management Engineering, University of the Aegean, June 2018.
14. S. Doudoumi, "**Reliability analysis for a subsea blowout preventer control system**", Department of Financial and Management Engineering, University of the Aegean, June 2018.
15. D. Stamoulis, "**Markov Modeling of Operation and Maintenance of a Medical Equipment System**", Department of Financial and Management Engineering, University of the Aegean, June 2018.
16. S. D. Dovletoglou, "**Natural disaster management in Bangladesh "Urban Resilience Project"**", Department of Financial and Management Engineering, University of the Aegean, June 2017.
17. V. Kontosfiri, "**Stochastic Modeling and Optimization of Car Park Management system with Priorities**", Department of Financial and Management Engineering, University of the Aegean, February 2017.
18. I. Mitrofani, "**Stochastic Modeling of an Industrial System**" Department of Financial and Management Engineering, University of the Aegean, June 2016.
19. A. Kyriakou, "**The statistical tool PERT and Monte Carlo simulation in Engineering Project Management**", Department of Financial and Management Engineering, University of the Aegean, (in progress).
20. A. Kadrefi, "**Availability Modeling for Mobile Cloud Computing**", Department of Financial and Management Engineering, University of the Aegean, (in progress).
21. A. Savvelis, "**Stochastic Modelin usin the Supplementary Variable Technique**", Department of Financial and Management Engineering, University of the Aegean, (in progress).
22. G. Vallas, "**A semi-Markov Model for the Reliability of Telecommunications Systems**", Department of Financial and Management Engineering, University of the Aegean, June 2014.
23. A. Manatos, "**Reliability Stochastic Modeling of Repairable Mechanical Systems**", Department of Financial and Management Engineering, University of the Aegean, June 2014.
24. N. Bakovasilis, "**Heuristic Algorithms for solving resource optimization problems**", Department of Financial and Management Engineering, University of the Aegean, September 2014.
25. I. Kavoura, "**Yield Management: Case study for effective income management in asirlines**", Department of Financial and Management Engineering, University of the Aegean, January 2014.
26. A. Achiladelli, "**Performace measures of a retrial queue with redundancy**", Department of Financial and Management Engineering, University of the Aegean, June 2013.
27. P. Diamantopoulos, "**Stochastic Modeling of Cloud Computing Service Reliability**", Department of Financial and Management Engineering, University of the Aegean, June 2012.
28. I. Stergiou, "**Modeling a two-unit system in parallel using Markov Regenerative Processes: Reliability and Performance Analysis**", Department of Financial and Management Engineering, University of the Aegean, (in progress).

29. E. Karagiannis, **“Modeling and Design of Opportunistic Maintenance Policies for Multi-Component Systems”**, Department of Financial and Management Engineering, University of the Aegean, (in progress).
30. I. Zachari, **“Modeling and optimization of resource availability in systems with clients’ priorities and unreliable resources”**, Department of Financial and Management Engineering, University of the Aegean, (in progress).
31. E. Mavrokefalou, **“Solving the vehicle routing problem with e-cargo bikes for last mile delivery”**, Department of Financial and Management Engineering, University of the Aegean, (in progress).

Hellenic Open University

1. D. Kefallinos, **“Statistical Analysis of road accident in Greece based on design-of-experiments methods”**, Hellenic Open University, MSc in Quality Assurance, September 2020.
2. N. Mpriasouli, **“Stochastic modeling and dependability analysis of medical diagnosis equipment: A case study for Computed Tomography (CT) scanning machine.”**, Hellenic Open University, MSc in Quality Assurance, September 2020.
3. S. Gara, **“Reliability of water supply systems from source to tap using Fault Tree Analysis (FTA)”**, Hellenic Open University, MSc in Quality Management and Technology, September 2019.
4. L. Koufos, **“Dependability and Performance of a Two-Unit Redundant Multi-stage Deteriorating Systems with Maintenance: The case of Non-Identical Units”**, Hellenic Open University, MSc in Quality Management and Technology, September 2019.
5. K. Nastoulis, **“Investigating the Implementation, Efficiency and Effectiveness of Management by Objectives (MBO) in Hellenic Air Forces: The case of Air Force Academy”**, Hellenic Open University, MSc in Quality Management and Technology, September 2019.
6. A. Vouros, **“Reliability analysis of structured heterogeneous wireless sensor networks in area surveillance systems”**, Hellenic Open University, Quality Management and Technology, September 2018.
7. E. Papadopoulou, **“Implementation of quality control methods and tools in food industry: Case study in the production of cheese alternatives.”**, Hellenic Open University, Quality Management and Technology, September 2018.
8. P. Triantafylopoulos, **“Statistical quality control methods and tools of the manufacturing process of door and window handles and metal parts at each plating phase”**, Hellenic Open University, Quality Management and Technology, September 2018.
9. M. Kaliva, **“Integrated Management System according to protocols AGRO 2.1. & AGRO 2.2.: Factors affecting its implementation at the prefectures of Pella and Florina and its recognition from foreign organizations”**, Hellenic Open University, MSc in Quality Management and Technology. September 2017.
10. Z. Apostolina, **“Risk Management and ISO 9001:2015. A case study in Risk Management on Regional Development Fund of Central Macedonia”**, Hellenic Open University, MSc in Quality Management and Technology. September 2017.
11. P. Rafailidis, **“A comparative analysis of the financial ratios of firms that are traded in the Stock Market of selected sectors of the Greek Economy and How the prototype ISO 31000: 2009 affects the firms that adopted it”**, Hellenic Open University, MSc in Quality Management and Technology. September 2017.
12. A. Papadopoulou, **“Investigation of the current status on the supply chain security management systems in food industry in Greece”**, Hellenic Open University, MSc in Quality Management and Technology, May 2017.
13. T. Mavraganis, **“Implementing Total Quality Management principles in the Banking Sector, the use of this model as leverage tool in the Training Policy and the Development of Human Resources, the prospects and the obstacles”**, Hellenic Open University, MSc in Quality Assurance, May 2014.
14. I. Marougas, **“Service Quality and Customer Satisfaction in a Telecommunication Service Provider in Greece”**, Hellenic Open University, MSc in Quality Assurance, September 2014.
15. A. Horianopoulou, **“Investigating the principles of total quality management in a financial institution”**, Hellenic Open University, MSc in Quality Assurance, September 2014.
16. E. Houstoulaki, **“The quality management and the necessity of the implementation of iso 9000 and haccp in organic farming”**, Hellenic Open University, MSc in Quality Assurance, September 2014.

Publications

International Journals

1. V.P. Koutras, A. Kadrefi, A.N. Platis (2021). A Cyclic Non-Homogenous Markov Chain Model for Resource Availability Optimization in a Two-Parking Lots System with Priority Classes and Resource Reservation. *Applied Stochastic Models in Business and Industry*, Vol. 38(1), Pages 182-210, (2018). doi: <https://doi.org/10.1002/asmb.2655>
2. V.P. Koutras, S. Malefaki, A.N. Platis (2021). Opportunistic maintenance on the automated switch mechanism of a two-unit multi-state system. *European Journal of Industrial Engineering*, Vol. 5(2), Pages 616-642. doi: [10.1504/EJIE.2021.10035757](https://doi.org/10.1504/EJIE.2021.10035757)
3. M. E. Fragkos, V. Zeimpekis, V. Koutras, I. Minis (2020). Supply planning for shelters and emergency management crews. *Operational Research, An International Journal*, Available online (12 March 2020), doi: <https://doi.org/10.1007/s12351-020-00557-7>.
4. V. P. Koutras, A. N. Platis (2019). On the performance of software rejuvenation models with multiple degradation levels. *Software Quality Journal*, Pages 1-37, doi: <https://doi.org/10.1007/s11219-019-09491-0>.
5. E. Baou, V.P. Koutras, V. Zeimpekis, I. Minis. Emergency evacuation planning in natural disasters under diverse population and fleet characteristics, *Journal of Humanitarian Logistics and Supply Chain Management*, Vol. 8(4), Pages 447-476, (2018). doi: <https://doi.org/10.1108/JHLSCM-11-2017-0066>
6. V.P. Koutras, S. Malefaki, A.N. Platis, Optimization of the dependability and performance measures of a generic model for multi-state deteriorating systems under maintenance, *Reliability Engineering & System Safety*, Vol. 166, Pages 73-86, (2017). doi: <http://dx.doi.org/10.1016/j.ress.201701.002>.
7. C. Salazaras, V. P. Koutras, N.S. Thomaidis, V. Vassiliadis, A.N. Platis, G. Dounias and C. Kyriazis, (2017). Resource Availability Modeling and Optimization in a Car Park Management Problem. *International Journal of Operations Research and Information Systems, Special Issue: Operations Research and its Application in Engineering*, Vol..8(2), Pages 56-77, (2017) doi:[10.4018/IJORIS.2017040103](https://doi.org/10.4018/IJORIS.2017040103)
8. A. Manatos, V. P. Koutras and A. N. Platis. Dependability and performance stochastic modelling of a two-unit repairable production system with preventive maintenance, *International Journal of Production Research*, Vol. 54 (21), Pages. 6395-6415, (2016). doi: [10.1080/00207543.2016.1201603](https://doi.org/10.1080/00207543.2016.1201603)
9. V. P. Koutras and A. N. Platis, A. N. User-perceived Availability of a Software Rejuvenation Model with Recovery Time Omission. *Quality and Reliability Engineering International*, Vol. 32(4), Pages 15-21-1533, (2016). doi: <https://doi.org/10.1002/qre.1862>
10. V.P. Koutras, S. Malefaki, A.N. Platis. Rejuvenation Effects on the Grid Environment Performance with Response Time Delays using Monte Carlo Simulation, *Simulation Modelling Practice and Theory*, Vol. 40, Pages 176-191 (2014). doi: <http://dx.doi.org/10.1016/j.simpat.2013.10.001>
11. V.P. Koutras, A. N. Platis, G. A. Gravvanis. Software Rejuvenation and Resource Reservation Policies for Optimizing Server Resource Availability using Cyclic Non-Homogeneous Markov Chains, *Applied Stochastic Models in Business and Industry*, Vol. 29(1), Pages 61-78 (2013). doi: [10.1002/asmb.945](https://doi.org/10.1002/asmb.945).
12. V.P. Koutras, A.N. Platis. Semi-Markov Performance Modeling of a Redundant System with Partial, Full and Failed Rejuvenation, *International Journal of Critical Computer Based Systems, Inderscience Publishers*, Vol. 1, (1/2/3), Pages 59-85, (2010). doi: [10.1504/IJCCBS.2010.031909](https://doi.org/10.1504/IJCCBS.2010.031909)
13. V.P. Koutras, A.N. Platis, G.A. Gravvanis. Availability and Performance on a Grid Computing Environment with Software Rejuvenation Based on Approximate Inverse Preconditioning. *HERMIS: The International Journal of Computer Mathematics and its Applications*, Elias A. Lipitakis (Editor-in-Chief), Vol. 11, Pages 69-86, (2010).
14. V.P. Koutras, A.N. Platis, G.A. Gravvanis. Optimal Server Resource Reservation Policies for Priority Classes of Users under Cyclic Non-Homogeneous Markov Modeling, *European Journal of Operational Research*, Vol. 198, Pages 545-556, (2009). doi: <http://dx.doi.org/10.1016/j.ejor.2008.09.031>
15. V.P. Koutras, A.N. Platis, G.A. Gravvanis, Software Rejuvenation for Resource Optimization Based on Explicit Approximate Inverse Preconditioning, *Applied Mathematics and Computation*, Vol. 189(1), John L. Casti, Melvin Scott (eds.)© 2007, Elsevier, Pages 163-177, (2007). doi: <http://dx.doi.org/10.1016/j.amc.2006.11.056>
16. V.P. Koutras, A. N. Platis, G. A. Gravvanis. On the Optimization of Free Resources Using Non-Homogeneous Markov Chain Software Rejuvenation Model. *Reliability Engineering and System Safety*, Vol. 92(12), Pages 1724–1732, (2007). doi : <http://dx.doi.org/10.1016/j.ress.2006.09.017>

Book Chapters

17. P.M. Psomas, A.N. Platis. (2022). Optimizing the Maintenance Strategy for Offshore Wind Turbines Blades Using Opportunistic Preventive Maintenance. *In W. Zamojski et al. (Eds.): DepCoS-RELCOMEX 2022, LNNS 484, (529469_1_En, Chapter 22)*, doi: https://doi.org/10.1007/978-3-031-06746-4_22, to appear
18. V.P. Koutras, S. Malefaki and A.N. Platis (2020). Dependability and Performance Analysis for a Two Unit Multi-State System with Imperfect Switch. *In A. Makrides, A. Karagrigoriou & C. Skiadas (Eds.), Data Analysis and Applications 4, Vol. 6, iSTE WILEY, London*, Pages 119-154.
19. V.P. Koutras, and A.N. Platis. (2020). Software Rejuvenation: Key Concepts and Granularity. *In T. Dohi, K.S. Trivedi & Alberto Avritzer (Eds.), Handbook of Software Aging and Rejuvenation, Fundamentals, Methods, Applications, and Future Directions*, World Scientific, Pages 41-70. doi: https://doi.org/10.1142/9789811214578_0003.
20. V.P. Koutras, S. Malefaki and A.N. Platis (2020). Stochastic Modelling of Opportunistic Maintenance for Series Systems with Degrading Components. *In Cui, Frenkel & Lisnianski (Eds.), Stochastic Modeling in Reliability Engineering*, CRC Press, Taylor and Francis Group, Boca Raton, Pages 183-197.
21. S. Malefaki, V.P. Koutras, and A.N. Platis. (2017). Optimizing availability and performance of a two-unit redundant multi-state deteriorating system. *Recent Advances in Multi-State Reliability, Springer Series in Reliability Engineering, Part of the Springer Series in Reliability Engineering book series (RELIABILITY), Springer, Berlin*. Pages 71-105. doi: https://doi.org/10.1007/978-3-319-63423-4_5
22. V.P. Koutras. Two-Level Software Rejuvenation Model with Increasing Failure Rate Degradation, *Dependable Computer Systems, Advances in Intelligent and Soft Computing Vol. 97*, Springer-Verlag Berlin Heidelberg, Pages 101-115, (2011). doi: [10.1007/978-3-642-21393-9_8](https://doi.org/10.1007/978-3-642-21393-9_8)

International Conferences Proceedings (with review)

23. P.M. Psomas, I. Dagkinis, A.N. Platis, V.P. Koutras, (2022), Modelling the Dependability of an Offshore Desalination System Using the Universal Generating Function Technique. *Proceedings of the 32nd European Safety and Reliability Conference (ESREL 2022)*, Eds: Maria Chiara Leva, Edoardo Patelli, Luca Podofillini, and Simon Wilson, ISBN: 978-981-18-5183-4. Research Publishing, Singapore, Dublin, Ireland, Pages: 1731-1738 doi: [10.3850/978-981-18-5183-4_R29-12-226-cd](https://doi.org/10.3850/978-981-18-5183-4_R29-12-226-cd)
24. I. A. Mitrofanis and V. P. Koutras, (2021). A Branching Process Model for the Novel Coronavirus (Covid-19) Spread in Greece. *International Journal of Modeling and Optimization: Proceedings of the 9th International Conference on System Modeling and Optimization, Budapest, Hungary, February 3-5, 2021*, Vol. 11(3), Pages 63-69. doi: [10.7763/IJMO.2021.V11.779](https://doi.org/10.7763/IJMO.2021.V11.779)
25. I. Mitrofanis and V.P. Koutras (2020). Modelling Refinery Pump System Reliability Using Branching Processes. *Proceedings of the 30th European Safety and Reliability Conference and the 15th Probabilistic Safety Assessment and Management Conference Edited by Piero Baraldi, Francesco Di Maio and Enrico Zio* Copyright : ESREL2020-PSAM15Organizers. Published by Research Publishing, Singapore. ISBN/DOI : 978-981-14-8593-0, Venice, Italy, 1-6 November 2020.
26. A. Kadrefi, V.P. Koutras and A.N. Platis (2020). Modelling Resource Reservation in a two-parking lot problem with client priorities. *Proceedings of the 30th European Safety and Reliability Conference and the 15th Probabilistic Safety Assessment and Management Conference Edited by Piero Baraldi, Francesco Di Maio and Enrico Zio* Copyright : ESREL2020-PSAM15Organizers. Published by Research Publishing, Singapore. ISBN/DOI : 978-981-14-8593-0, Venice, Italy, 1-6 November 2020.
27. P. Psomas, A.N. Platis and V.P. Koutras (2020). Modelling the Dependability Measures of a Multi-State Degraded Wind Farm System with Minimal Repairs Using the UGF Technique. *Proceedings of the 30th European Safety and Reliability Conference and the 15th Probabilistic Safety Assessment and Management Conference Edited by Piero Baraldi, Francesco Di Maio and Enrico Zio* Copyright : ESREL2020-PSAM15Organizers. Published by Research Publishing, Singapore. ISBN/DOI : 978-981-14-8593-0, Venice, Italy, 1-6 November 2020.
28. A. Kadrefi, V.P. Koutras and A.N. Platis (2020). Profit Optimization in a Two-Parking Lots System with Priority Clients using Resource Reservation Policies. *In Proc of XIV Balkan Conference on Operational Research, BALCOR 2020*, Thessaloniki, Greece, 30 September-3 October 2020. Pages 382-386.
29. V. P. Koutras, S. Malefaki and A. N. Platis, (2018). Optimal Maintenance Policies of a Two Unit Multi-State Deteriorating System with Imperfect Switch. *In Proc. of 5th Stochastic Modeling Techniques and Data Analysis International Conference*, Chania, Crete, Greece, 12-15 June 2018.

30. P.M. Psomas, A. N. Platis and V. P. Koutras, (2018). Modeling the Reliability and Performance of a Wind Farm Using the Universal Generating Function Technique. *In Proc. of 5th Stochastic Modeling Techniques and Data Analysis International Conference*, Chania, Crete, Greece, 12-15 June 2018, Pages 497-508.
31. S. Malefaki, V.P. Koutras and A.N. Platis, Multi-State Deteriorating System Dependability with Maintenance using Monte Carlo Simulation. *In Proc of SMRLO'16 2016:Second International Symposium on Stochastic Models in Reliability Engineering, Life Science and Operations Management*, February 2016, SCE-Shamoon College of Engineering, Beer Sheva, Israel, Pages 61-70, (2016) doi: [10.1109/SMRLO.2016.21](https://doi.org/10.1109/SMRLO.2016.21)
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Editorial Activity

PC Member in:

- Member of the Technical Program Committee 9th International Workshop on Software Aging and Rejuvenation WoSAR 2021, 2020, 2019, 2018, 2017
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- Heliyon
- Computers & Industrial Engineering
- IEEE Transactions on Emerging Topics in Computing
- International Journal of Operational Research
- Journal of Reliability and Statistical Studies
- Journal of Industrial and Management Optimization
- International Journal of Electrical Power and Energy Systems
- Mathematics
- The Journal of Systems and Software
- Operations Research Letters

- Transactions on Dependable and Secure computing
- Applied Ocean Research
- Journal of Grid Computing
- Journal of Heuristics
- Mathematical Problems in Engineering
- Journal of Systems Science and Systems Engineering
- Journal of Reliability and Statistical Studies
- International Journal of System Assurance Engineering and Management
- Methodology and Computing in Applied Probability
- Production Research
- Applied Stochastic Models in Business and Industry
- Engineering Optimization
- RAIRO-Operations Research
- Reliability Engineering and System Safety
- Stochastic Models
- Communications in Statistics - Simulation and Computation
- Journal of Computational and Applied Mathematics
- International Journal of Machine Learning and Cybernetics
- Performance Evaluation, Special Issue on Software Aging and Rejuvenation
- ACM Journal of Emerging Technologies in Computing
- IEEE Transactions on Dependable and Secure Computing
- Journal of Systems and Software
- International Journal on Artificial Intelligence Tools
- Future Generation Computer Systems
- International Journal of Parallel, Emergent and Distributed Systems
- International Journal of Computer Mathematics: Computer Systems Theory
- International Journal of Electrical Power and Energy Systems

Referee in international conferences:

- International Workshop on Software Aging and Rejuvenation - WoSAR
- European Workshop on Performance Engineering – EPEW
- European Safety and Reliability conference – ESREL
- IFAC Conference on Manufacturing Modelling, Management, and Control – MIM

Scholarships

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