Curriculum Vitae

Dr. Vasilis P. Koutras
Associate Professor (Γ΄ 4370/31.12.2024)
Stochastic Modeling
Department of Financial and Management Engineering,
School of Engineering,
University of the Aegean
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Birth Date: 29/08/78

Associate Professor

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 Relaibility.

1997 - 2002 BSc in **Mathematics,** Department of Mathematics, University of Patras, Greece

Academic Posistions

01/ 2025 – today **Associate Professor**
Department of Financial and Management Engineering, University of the Aegean
Teaching:

Operations Research II: AcY. 24-25, 25-26, 26-27

Modelling Analysis and Design of Stochastic Systems: AcY. 24-25, 25-26

Statistics: AcY. 24-25, 25-26

Stochastic Models: AcY. 24-25, 25-26

12/ 2020 – 12/2024 **Assistant Professor (tenured)**
Department of Financial and Management Engineering, University of the Aegean
Teaching:

Operations Research II: AcY. 20-21, 21-22, 22-23, 23-24, 24-25

Modelling Analysis and Design of Stochastic Systems: AcY. 20-21, 21-22, 22-23, 23-24, 24-25

Statistics: AcY. 20-21, 21-22, 22-23, 23-24, 24-25

Stochastic Models: AcY. 20-21, 21-22, 22-23, 23-24, 24-25

1/ 2025 – today **Associate Professor**
Department of Financial and Management Engineering, University of the Aegean,
Postgraduate Program in Financial & Management Engineering
Teaching:

Financial Mathematics: AcY. 24-25

10/ 2023 – 12/2024 **Assistant Professor**
Department of Financial and Management Engineering, University of the Aegean,
Postgraduate Program in Financial & Management Engineering
Teaching:

Financial Mathematics: AcY. 23-24, 24-25

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

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

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

10/ 2005 – 7/ 2014 **(1) Adjunct Faculty Member**at
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

10/2023 – 2/2025 **Postgraduate Program: Economics and Management for Engineers,**
Department of Financial and Management Engineering, University of the Aegean
Teaching:
Financial Mathematics: *AcY 23-24, 24-25*

10/2025 – 7/2026 **Hellenic Open University**
School of Science & Technology
Academic Staff, Postgraduate Program: ***Data Science and Machine Learning (DAMA)***,
Course: ***DAMA 50 Mathematics for Machine Learning***

10/2024 – 7/2025 **Hellenic Open University**
School of Science & Technology
Academic Staff, Postgraduate Program: ***Data Science and Machine Learning (DAMA)***,
Course: ***DAMA 50 Mathematics for Machine Learning***

10/2023 – 7/2024 **Hellenic Open University**
School of Science & Technology
Academic Staff, Postgraduate Program: ***Data Science and Machine Learning (DAMA)***,
Course: ***DAMA 50 Mathematics for Machine Learning***

10/2022 – 7/2023 **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 **Relaibility Enigeeniring Laboratory (REL),** ***Department of Financial and Management Engineering***, **University of the Aegean**

Research Activity

1/2025 – 12/ 2025 **Researcher** (Department of Financial and Management Engineering, University of the Aegean, RELab) *in INTERREG ADRION PROGRAMME Funding Project:*

'ABBA - Adriatic-Ionian SustainaBle Blue Economy Alliance for upscalling SMEs» ***(Code: 81124)***

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 COMMISION – 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 Thesis**. *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. Kadrefi PhD Thesis**. *Title:* **Sustainable 3D Printing,** Department of Business Administration, School of Engineering, University of the Aegean ***(2024-today)***

2. 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)***.

3. 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)***.

4. 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 ***(July 2026)***

5. 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: **A. Symeonidou**, **Master by Research**. *Title:* **Markov Regenerative processes and Applications,** Department of Financial and Management engineering, School of Engineering, University of the Aegean. ***2026***.

2. Supervisor: **S. Petri**, **Master by Research**. *Title:* Modeling **Modeling opportunistic maintenance in contemporary technological systems,** Department of Financial and Management engineering, School of Engineering, University of the Aegean. (***2024-today***).

3. 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. **2024**.

4. 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**.

5. 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. K. Kefalonika, "***Modeling and analysis of a double-ended queuing system for efficient passenger-taxi service at airports***", Department of Financial and Management Engineering, University of the Aegean, February 2026.
2. M. Bereti, ***"Development of routing algorithms for autonomous delivery robots for goods deliveries in urban environment"***, Department of Financial and Management Engineering, University of the Aegean, *Note: Co-supervising with V. Zeimpekis*. January 2026.
3. E. Chaintini, "***Credit rating Stochastic modeling using continuous time Markov chains***", Department of Financial and Management Engineering, University of the Aegean, September 2025.
4. N. Pappas, "***Stochastic modeling of software rejuvenation and dependability measures' optimization on a roadside unit in road network fog computing",*** Department of Financial and Management Engineering, University of the Aegean, February 2024.

5. G. Dailidis, "***Stochastic modeling and analysis of a two unit series system with two types of failures and opportunistic maintenance",*** Department of Financial and Management Engineering, University of the Aegean, February 2024.
6. E. Pittaka, "***Modeling multi-granularity opportunistic software rejuvenation for a two-unit series system",*** Department of Financial and Management Engineering, University of the Aegean, February 2024.
7. A.E. Tzagkournisakis, ***"Modelling and analysis of a queueing system for ICU capacity during COVID-19"***, Department of Financial and Management Engineering, University of the Aegean, July 2024.
8. A. Selemidis, ***"Modelling, Analysis and Design of Optimum Opportunistic Maintenance Schedules for Systems with multi-stage degrading components"***, Department of Financial and Management Engineering, University of the Aegean, October 2023.
9. P. Pagonis, ***"Modelling opportunistic maintenance on a wind turbine's subsystems using Markov models"***, Department of Financial and Management Engineering, University of the Aegean, October 2023.
10. C. Betsas, ***"Stochastic modeling and reliability and performance analysis of RAID Systems under different conditions using Markov models"***, Department of Financial and Management Engineering, University of the Aegean, October 2023.
11. 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, October 2023. *Note: Co-supervising with V. Zeimpekis*.
12. L. Tempelis, "***Design and development of a multi-criteria algorithm for scheduling routes for combined freight transportation***", Department of Financial and Management Engineering, University of the Aegean, September 2023. Note: Co-supervising with V. Zeimpekis.
13. 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, June 2023.
14. E. Karagiovannis, ***"Modeling and Design of Opportunistic Maintenance Policies for Multi-Component Systems"***, Department of Financial and Management Engineering, University of the Aegean, June 2023.
15. 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, January 2023.
16. C. Gika, ***"Markov Models for Covid-19 Survival Analysis in Greece"***, Department of Financial and Management Engineering, University of the Aegean, July 2022
17. 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.
18. E. Athanasiadis, "***Solving the Van-Drone Routing In-Tandem Problem in Last Mile with Multiple Delivery Points***", Department of Financial and Management Engineering, University of the Aegean, January 2022. *Note: Co-supervising with V. Zeimpekis*.
19. 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*.
20. 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.
21. 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.
22. 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.
23. 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, Februaty 2020.
24. T.T.M. Saltsidis, "***Stochastic Modeling of a Standby System with Two Non-Identical Units****",* Department of Financial and Management Engineering, University of the Aegean, January 2020.
25. 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.

26. 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.
27. 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.
28. 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.
29. S. Doudoumi, "***Reliability analysis for a subsea blowout preventer control system"***, Department of Financial and Management Engineering, University of the Aegean, June 2018.
30. 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.
31. S. D. Dovletoglou, «***Natural disaster management in Bangladesh "Urban Resilience Project"***», Department of Financial and Management Engineering, University of the Aegean, June 2017
32. 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.
33. I. Mitrofani, " ***Stochastic Modeling of an Industrial System***" Department of Financial and Management Engineering, University of the Aegean, June 2016.
34. 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).
35. A. Kadrefi, "***Availability Modeling for Mobile Cloud Computing***", Department of Financial and Management Engineering, University of the Aegean, (in progress).
36. A. Savvelis, "***Stochastic Modelin usin the Supplementary Variable Technique***", Department of Financial and Management Engineering, University of the Aegean, (in progress).
37. G. Vallas, "***A semi-Markov Model for the Realiability of Telecomunications Systems***", Department of Financial and Management Engineering, University of the Aegean, June 2014.
38. A. Manatos, "***Reliability Stochastic Modeling of Repairable Mechanical Systems"***, Department of Financial and Management Engineering, University of the Aegean, June 2014.
39. N. Bakovasilis, "***Heuristic Algorithms for solving resource optimization problems***", Department of Financial and Management Engineering, University of the Aegean, September 2014.
40. I. Kavoura, "***Yield Management: Case study for effective income management in asirlines***", Department of Financial and Management Engineering, University of the Aegean, January 2014.
41. A. Achiladelli, ***"Performace measures of a retrial queue with redundancy"***, Department of Financial and Management Engineering, University of the Aegean, June 2013.
42. P. Diamantopoulos, "***Stochastic Modeling of Cloud Computing Service Reliability***", Department of Financial and Management Engineering, University of the Aegean, June 2012.

Hellenic Open University

1. A. Galiotos. "***Investigating the environmental policy and health-safety rules in public administration and their understanding and implementation by employees***", MSc in Quality Management and Technology, September 2025
2. F. Iakovidou. "***Life cycle analysis of LIBs and assessment of carbon footprint and the corresponding ecological indicators***", MSc in Quality Management and Technology, September 2024.
3. D. Kefallinos, "***Statistical Analysis of road accident in Greece based on design-of-experiments methods"***, Hellenic Open University, MSc in Quality Assurance, September 2020.
4. 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.
5. 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.
6. 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.

7. 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.
8. A. Vouros, "***Reliability analysis of structured heterogenous wireless sensor networks in area surveillance systems***", Hellenic Open University, Quality Management and Technology, September 2018.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. 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.
15. 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.
16. I. Marougas, "***Service Quality and Customer Satisfaction in a Telecommunication Service Provider in Greece"***, Hellenic Open University, MSc in Quality Assurance, September 2014.
17. A. Horianopoulou, "***Investigating the principles of total quality management in a financial institution"***, Hellenic Open University, MSc in Quality Assurance, September 2014.
18. 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. P.M. Psomas, A.N. Platis, V.P. Koutras and I.K. Dagkinis (2026). System-Level Maintenance Strategy for Offshore Hybrid Renewable Energy Systems Based on Cyclic Non-Homogeneous Markov Chain Modelling, ***Sustainable Energy Technologies and Assessment***. ***accepted***

2. V.P. Koutras, A.N. Platis, (2025). Modeling Smart Rejuvenation on a Series System with Different Failure Modes, ***Software Quality Journal***, Vol. 33(13). **doi**: https://doi.org/10.1007/s11219-025-09710-x

3. P. M. Psomas, A. N. Platis, V. P. Koutras, I. K. Dagkinis, (2025). Intermittent System Utilization for an Efficient Maintenance Planning of Offshore Wind Turbine Rotor Blades, ***Ocean Engineering***, Vol. 318, 2025, 120181, ISSN 0029-8018, **doi**: https://doi.org/10.1016/j.oceaneng.2024.120181.

4. V.P. Koutras, S. Malefaki (2024). Modeling opportunistic maintenance and its effects on the dependability and performance of k-out-of-n systems. ***International Journal of Reliability and Safety***. Vol. 18, No. 4, Pages 337-362. **doi**: 10.1504/IJRS.2024.10065954

5. V. P, Koutras (2023). A Markov Regenerative Process Model for the Dependability and Performance of a Two-Unit Multi-State System under Maintenance. ***Reliability Engineering and System Safety***. Volume 238, October 2023, 109433. **doi:** https://doi.org/10.1016/j.ress.2023.109433 .

6. E. Athanasiadis, V.P. Koutras, V. Zeimpekis (2023). Dataset for the van-drone routing problem with multiple delivery drop points. ***Data in Brief***. Vol. 48, 2023, 109192, ISSN 2352-3409. **doi:** https://doi.org/10.1016/j.dib.2023.109192

7. M Thymianis, A. Tzanetos, G. Dounias, V.P. Koutras, (2023). Hybridization in nature inspired algorithms as an approach for problems with multiple goals: an application on reliability-redundancy allocation

problems. ***Engineering Applications of Artificial Intelligence***. Vol 121, May 2023, 105980. **doi:** https://doi.org/10.1016/j.engappai.2023.105980

8. 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
9. 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
10. 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.
11. 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.
12. 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
13. 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.
14. C. Salagaras, 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
15. 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
16. 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
17. 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
18. 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**.**
19. 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
20. 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).
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Editorial Activity

PC Member in:

- Member of the Technical Program Committee 9th International Workshop on Software Aging and Rejuvenation WoSAR 2026, 2025, 2024, 2023, 2022, 2021, 2020, 2019, 2018, 2017
- Member of the Technical Program Committee 14th European Performance Engineering Workshop, EPEW 2017

Referee in international journals:

- Journal of Dynamics and Games
- Ocean Engineering
- International Journal of Modelling and Simulation
- Journal of Reliability Science and Engineering
- Part O-Journal of Risk and Reliability
- IEEE Transactions on Systems, Man and Cybernetics
- IEEE Transactions on Reliability
- Software: Practice and Experience
- Computers and Industrial Engineering
- Quality in Maintenance Engineering
- International. Journal of Artificial Intelligence and Soft Computing
- International. Journal of Computational Science and Engineering
- European Journal of Operational Research
- International Journal of Power Electronics
- Heliyon
- International Journal of Disaster Risk Reduction
- 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
- 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
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Scholarships

5/2008 – 8/2008	Scolarship from **State Scholarship Foundation.** for ERASMUS exhange PhD students in: ***Universite de Techologie de Compiegne, Centre de Recherche de Royallieu , LMAC, Compiegne, France***.
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