

Call for Papers

Special Issue of Foundations of Computing and Decision Sciences

Open access, no publication fee journal (<https://sciendo.com/journal/fcds>)

Indexed by Scopus and Web of Science (ESCI)

Special Issue on

“Computational Performance Analysis based on Novel Intelligent Methods:

Exploration and Future Directions in Production and Logistics”

Papers related to the subject of “Computational Performance Analysis based on Novel Intelligent Methods: Exploration and Future Directions in Production and Logistics” will be considered for peer reviewed publication in a special issue of the journal Foundations of Computing and Decision Sciences (FCDS; <http://fcds.cs.put.poznan.pl/fcds/>).

In today's highly competitive and evolving situation, organizations must spend significant time, energy, and financial resources to evaluate their performance in achieving strategic goals. One of the topics that can play a significant role in the success of an organization is the proper understanding of performance and then efficient planning for the future of that organization. Performance evaluation and management, as well as clarifying the current situation of an organization, can also map the strategic plan of the organization.

In designing a computational Performance Analysis (CPA) system, it should be always noted that the system runs well when it is balanced and covers different dimensions of the organization's processes. For this reason, the use of intelligent decision-making methods can considerably assist in designing a CPA system. Novel intelligent methods provide convenient and accurate solutions for superintendents by taking into account different aspects of a real-word system and analyzing a large amount of information. Therefore, it is necessary to help administrators in various disciplines by comparing, evaluating, and analyzing a variety of intelligent decision-making methods.

This Special Issue (SI) aims to bring together current progresses on the CPA, organization management, and novel models and solution techniques that can contribute to a better understanding of the CPA systems and delineate useful practical strategies. Methodologically interesting and well-documented case studies are highly recommended.

This SI provides innovative cutting-edge research methodologies and applications in the related research field. Pioneered and unpublished high-quality research items are just invited to this SI which includes, but are not limited to:

- Application of machine learning in CPA systems
- Application of neural networks and their developed versions in CPA systems
- Big data analytics and related methods in CPA systems
- Fuzzy interface systems and their applications in CPA systems
- Hybrid stochastic methods and their applications in CPA systems
- Game theory and its application in CPA systems
- Novel heuristic and meta-heuristic algorithms and their applications in systems
- Emerging multi-criteria decision-making methods and their applications in systems

The use of *novel intelligent method* is a prerequisite for any paper submitted to this special issue to enter the reviewing process.

The quality and topics of the submissions should correspond to the high standards of publications in FCDS and its Aims and Scope: <http://fcds.cs.put.poznan.pl/fcds/>.

Important Dates

Full Paper Submission will start on: 1 April 2021

Deadline for submission: 30 July 2021

Special issue will close on: 31 December 2021

The special issue is planned to be published during 2022, the assignment of accepted papers to the given volume (and its date) depends on the finishing the reviewing and revision process.

Submissions should follow the journal's style and guidelines presented here:

<http://fcds.cs.put.poznan.pl/FCDS/Submissions.aspx>.

Manuscript submission must be made by e-mail to the following address that authors should mention in their letter to the Editorial Office that the manuscript is submitted to this "Special Issue": fcds@cs.put.poznan.pl.

In case of any question, please contact by e-mail the guest editors:

Prof. Gerhard-Wilhelm Weber

Faculty of Engineering Management, Poznan University of Technology, Poland

Email: gerhard.weber@put.poznan.pl

Dr. Alireza Goli

Department of Industrial Engineering, University of Isfahan, Isfahan, Iran

Email: Goli.A@eng.ui.ac.ir

Dr. Erfan Babae Tirkolae

Department of Industrial Engineering, Istinye University, Istanbul, Turkey

Email: erfan.babae@istinye.edu.tr

Biographies



G.-W. Weber is a Professor at Poznan University of Technology, Poznan, Poland, at Faculty of Engineering Management. His research is on mathematics, operational research, finance, economics, optimization and control, natural, neuro-, bio- and earth-sciences, medicine, data science, analytics, artificial intelligence, education, development and cosmology. He is involved in the organization of scientific life internationally. He received Diploma and Doctorate in Mathematics, and Economics / Business Administration, at RWTH Aachen, and Habilitation at TU Darmstadt (Germany). He replaced Professorships at University of Cologne, and TU Chemnitz, Germany. At Institute of Applied Mathematics, Middle East Technical University, Ankara, Turkey, he was a Professor in both Financial Mathematics and Scientific Computing, and Assistant to the Director, and has been a member of five further graduate schools, institutes and departments of METU. G.-W. Weber has different affiliations at Universities of Siegen (Germany), Federation University (Ballarat, Australia), University of Aveiro (Portugal), University of North Sumatra (Medan, Indonesia), Malaysia University of Technology, Chinese University of Hong Kong, KTO Karatay University (Konya, Turkey), Mazandaran University of Science and Technology (Babol, Iran) and Georgian International Academy of Science, at EURO (Association of European OR Societies) where he is "Advisor to EURO Conferences" and IFORS (International Federation of OR Societies), where he is member in many national OR societies and working groups, at Pacific Optimization Research Activity Group, etc. G.-W. Weber has (co-) supervised many MSc. and PhD. students, (co-) authored numerous books, special issues and articles, and given many presentations from a diversity of subject areas, on theory, methods and practice. He has been a member of many international editorial and award boards; he participated at and was in charge of numerous research projects; he received various recognitions and awards by students, universities, conferences and scientific organizations, nationally and internationally.



Alireza Goli was born in Isfahan, Iran, in 1989. He received his Bachelor and Master Degree in Industrial Engineering from Golpayegan University of Technology (Iran, 2013) and Isfahan University of Technology (Iran, 2015) respectively. Then, he received a Ph.D. degree in Industrial Engineering from Yazd University (Iran, 2019). Now, he is a lecturer at Isfahan University which is one of the famous universities in Iran. He has published more than 60 papers in high-quality journals and conferences and has been serving as a reviewer in many reputed journals such as IEEE Transactions on Fuzzy System, Journal of Supercomputing, and Annals of Operations Research. He has reached an excellent reviewer in Publons in 2019. He has been serving as a reviewer in many reputed journals such as Supercomputing, IEEE Transactions on Fuzzy System, and expert system with application. He is working as a member of the editorial board in different journals like Journal of Applied research in Industrial Engineering, and International Journal of Applied Optimization Studies. His current research interests include supply chain management, disaster relief optimization, meta-heuristic algorithms, robust optimization, artificial intelligence, portfolio management.



Erfan Babae Tirkolae obtained a BSc. (2012) and MSc. (2014) in Industrial Engineering from Isfahan University of Technology in Isfahan, Iran. Then, he received a Ph.D. degree (2019) in Industrial Engineering from Mazandaran University of Science and Technology in Babol, Iran. Dr. Erfan Babae Tirkolae is currently an assistant professor in the Department of Industrial Engineering at Istinye University in Istanbul, Turkey. Meanwhile, he has worked as a Quality Assurance consultant and training manager in some automotive industries in Iran, and could go through different relevant courses like ISO 9001: 2015 and IATF 16949-2016. He has been verified as a scientific elite by the Young Researchers and Elite Club, Islamic Azad University in 2017 and Iran's National Elites Foundation in 2018. He has published more than 65 papers in high-quality journals and conferences and has been serving as a reviewer in many reputed journals such as IEEE Transactions on Fuzzy System, Journal of Cleaner Production and Computers and Industrial Engineering. Erfan Babae Tirkolae has been recognized as Top Peer Reviewer in 2 of the Essential Science Indicators research areas by Publons. Moreover, he has been a member of the editorial board in several scientific journals such as Management Decision and Journal of Industrial Engineering and Management Studies. His research interests mainly include Waste Management, Supply Chain Management and Transportation/Routing Problems, Operations Research, Fuzzy Systems, Solution Algorithms, Artificial Intelligence.