

EURO Newsletter # 82 May 8, 2020

Visit our Website



We welcome submissions to the following journals published by EURO.

European Journal of Operational Research (EJOR), published by Elsevier. Created as an independent journal in 1976, EJOR became a EURO journal in 1990. Its coordinating Editor is Roman Slowinski.

EURO Journal on Computational Optimization (EJCO), published by Springer. It was officially launched in 2011. Its Editor in Chief is Martine Labbé.

EURO Journal on Decision Processes (EJDP), published by Springer. It was officially launched in 2011. Its Editor in Chief is Vincent Mousseau.

EURO Journal on Transportation and Logistics (EJTL), published by Elsevier. It was officially launched in 2011. Its Editor in Chief is Dominique Feillet.

We now have 10 <u>tutorials</u> published in the series of EURO Advanced Tutorials. Please take a look at our titles:

- *Orienteering Problems: Models and Algorithms for Vehicle Routing Problems with Profits
- *Nonlinear Programming Techniques for Equilibria
- *Analytical Techniques in the Assessment of Credit Risk
- *Traffic Flow Modelling
- *Supply Chain Finance
- *Metaheuristics for Business Analytics
- *Compact Extended Linear Programming Models
- *Multiobjective Linear and Integer Programming
- *Dual-Feasible Functions for Integer Programming and Combinatorial Optimization
- *Linear and Mixed Integer Programming for Portfolio Optimization

EURO Advanced Tutorials on Operational Research

Series Editors

- M. Grazia Speranza, Dipartimento de Economia e Management. Università di Brescia. Italy. (e-mail: grazia.speranza@unibs.it)
- José Fernando Oliveira, Faculdade de Engenharia. Universidade do Porto, Portugal. (e-mail:jfo@fe.up.pt)

Please contact the editors for more information or to submit ideas for topics.

It is important to include reminders about particular EURO events and publications as the deadlines approach but these will now be shaded slightly so that regular readers can more easily see the new items.

Special Announcements



EURO 2021 Athens, Greece, 11-14 July, 2021



The next EURO conference is due to take place in the wonderful location of Athens, Greece, in July 2021. The organising and programme committees are working hard to make this a fantastic conference, with excellent speakers, a fantastic social programme, and opportunities to network. Although times are still uncertain we hope that this will be a perfect opportunity to get together with our international OR colleagues and discuss our rich topics and progress.

Please save the date and watch out for new announcements.

EURO WISDOM Forum on Bias/Fairness and Al



In January 2020, EURO launched an initiative called the EURO *WISDOM Forum* to support, empower, and encourage the participation of all genders in Operations Research and Management Science within EURO. **WISDOM** stands for **W**omen In **S**ociety: **D**oing **O**perational Research and **M**anagement Science. In particular, it aims to promote inclusivity by the following actions:

- 1. Advise/make recommendations/highlight best practices to the EURO executive on issues facing women in OR. Such guidelines can be disseminated to EURO member societies and Working Groups. Positive progress, outcomes and activities of member societies can serve as a template for other member societies;
- 2. Promote championing, networking and mentoring, particularly of women at the early stages of their career in OR;
- 3. Promote a conversation around how OR can be utilized to help create a diverse and inclusive future.

WISDOM held its first event on April 20, 2020, on Zoom, a webinar facilitated by Dr Paula Carroll, UCD, EURO WISDOM Forum Chair on Bias/Fairness and Artificial Intelligence.

Prof Alan Smeaton (https://www.computing.dcu.ie/~asmeaton) spoke on *Data bias in automatic image and video captioning and its impact*.

Dr. Claire Gormley (https://people.ucd.ie/claire.gormley) presented a talk Be fair to the models: the importance of assumptions in data analytics and modelling.

Dr Fintan Costello (https://people.ucd.ie/fintan.costello) spoke about Bias and rationality in human reasoning (and why the same biases apply to AI).

Dr Susan Leavy (https://people.ucd.ie/susan.leavy) spoke on Gender bias and Artificial Intelligence.



Prof Alan Smeaton spoke on Data bias in automatic image and video captioning and its impact.

The webinar was well attended with 51 participants (Female 29, Male 22) from Austria, Belarus, France, Greece, India, Iran, Ireland, Italy, Netherlands, Portugal, Spain, Sweden, Turkey, United Kingdom, and the USA who showed interest in understanding data bias in respective disciplines. A lively roundtable discussion in the form of written questions was facilitated. Unfortunately, due to the strict time limits, not all the questions could be answered. The webinar participants expressed their interest in continuing the discussion in future events.

The EURO WISDOM Forum pages on the EURO website are under construction. Further details on the webinar will be made

available on the website once it is up and running.

All interested may contact the EURO WISDOM Forum by emailing wisdom@euro-online.org or by joining the EURO WISDOM group on LinkedIn.

Conferences, Schools and Meetings

EWG DSS, EURO working group on Decision Support Systems

ICDSST 2020 6th International Conference on Decision Support System Technology



ONLINE, 27-29 May, 2020

The Conference is maintained but all programmed conferences and presentations will be on-line.

Thanks to the University of Zaragoza, Spain, Prof. José Maria Moreno Jimenez and its team, the conference will be held in an electronic way.

All information will be included on the conference website.

EWG DSO, EURO working group on Data Science meets Optimization

Workshop Data Science meets Optimisation, DSO@IJCAI

ONLINE, 11 July, 2020



Website

Data science and optimization are closely related. On the one hand, many problems in data science can be solved using optimizers, on the other hand optimization problems stated through classical models such as those from mathematical programming cannot be considered independent of historical data. Examples are ample: Machine Learning (ML) often relies on optimization techniques such as linear or integer programming; reasoning systems have been applied to constrained pattern and sequence mining tasks; a parallel development of metaheuristic approaches has taken place in the domains of data mining and machine learning; methods aimed at high level combinatorial optimization have been shown to strongly profit from configuration, algorithm selection and tuning tools building on historical data; ML models can be embedded in combinatorial optimization problems to address hard-to-model systems, or for validation of the ML model itself; "predict, then optimize" scenarios can be dealt with in an integrated fashion to improve considerably the solution quality.

The aim of the workshop is to organize an open discussion and exchange of ideas by researchers from Data Science, Constraint Optimization and Operations Research in order to identify how techniques from these fields can benefit each other.

IMPORTANT DATES

- June 10 (AOE): deadline for submitting contributions
- June 15: notification of acceptance
- July 11: workshop

EWG ORAHS, EURO working group on Health Services

ORAHS 2020 - 46th International Conference on OR applied to Health Service

ONLINE, 26-31 July, 2020



Website

Due to covid-19 pandemic, we will host this conference as an e-conference including social eevents.

Deadline of registration: May 30, 2020 (extended due to covid-19 pandemic but limited to the ones who have submitted papers/posters and all co-authors as a frist step because of limited e-space)

EURO working group on Lot Sizing

IWLS – International Workshop on Lot Sizing

Oslo, Norway, 24-26 August, 2020



Website

The 11th edition of the International Workshop on Lot Sizing will be held in Oslo, Norway. The venue of the workshop is BI Norwegian Business School (www.bi.edu)

As in the previous years (2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019), the goal of the workshop is to cover recent advances in lot sizing: new approaches for classical problems, new relevant problems, integration of lot sizing with other problems such as scheduling, distribution or vehicle routing, presentation of case studies, etc. The workshop will also aim at favouring exchanges between researchers and enhancing fruitful collaboration.

• Short abstract submission deadline: May 15

Acceptance notice: May 29

• Extended abstract submission deadline: June 30

• Earlybird registration: June 30

· Late registration: July 31

As in the previous years, the goal of the workshop is to cover recent advances in lot sizing: New approaches for classical problems, new relevant problems, integration of lot sizing with other problems such as scheduling, distribution or vehicle routing, presentation of case studies, etc. The workshop also aims at favouring exchanges between researchers and enhancing fruitful collaboration.

A limited number of participants who are active in the field are invited. If you know any researcher that may be interested but did not get an invitation, please let us know. As in the previous years, we foresee to have approximately 25 presentations in a single track.

Please send your abstracts to the following email address iwls2020.norway@gmail.com, with the subject "IWLS2020 abstract submission".

Please use the following Latex template for your submissions: IWLS2020 template

EWG ORD, EURO working group on Operations Research for Development

EWG-ORD Workshop 2020. Data Technologies & Analytics for Sustainable Development.



Magaliesburg, South Africa, 29-30 August, 2020

Website

Save the date!

The workshop brings together academic researchers and practitioners interested in pushing the envelope on sustainable development. The workshop theme for this year is, "Data Technologies & Analytics for Sustainable Development." The Workshop is hosted as a satellite event to 2020 meetings of the Operations Research Society of South Africa (ORSSA). Here are some of the focus areas we hope to address in this year's workshop (https://youtu.be/v-zGHqMyd7o).

More in the full call for papers coming shortly.

Deadline 1st June 2020.

Operations Research Society of South Africa (ORSSA)

ORSSA Conference 2020

Magaliesburg, South Africa, 30 August - 2 September, 2020



The 49th Annual Conference of the Operations Research Society of South Africa (ORSSA) will take place at Valley Lodge in Magaliesburg, South Africa and will be hosted by the Vaal Triangle Chapter.

The theme of this year's conference is Analytics for sustainability, and will provide delegates the opportunity to engage with academic presentations by experienced academics and industry leaders on, amongst other, the following topics:

- *Energy
- *Logistics
- *Health care
- *Finance

The Conference will kick off with an optional **tutorial** on Sunday the 30th of August which will be followed by the welcome reception. The official **program** of the Conference will run from 08:00 on Monday the 31st of August to 14:00 on Wednesday the 2nd of September.

Abstract submission closes 1 June 2020.

EURO working group on Agriculture and Forest Management

VI Workshop on Optimization Under Uncertainty in Sustainable Agriculture and Agrifood Industry and IV BigDSS Agro Conference

ONLINE, 3-5 September, 2020

Website

AGRIGULTURE AND

FOREST MANAGEMENT

The BigDSSAgro conference is devoted to decision support systems in agriculture, which combine models, databases (Bigdata) and algorithms to support many real-world decision-making problems.

The access to cheap sensor technology, drones, climate data and forecasts, satellite information about soils, humidity and more is provoking a revolution with the irruption of Big Data and opening the door to the development and application of novel optimization and simulation models in Agriculture and the Agri-food industries.

The main question to solve is how to transform the huge amount of data into useful information to decision-makers. Current applications cover a wide range of different areas, from food production or animal welfare to sustainability or climate change impact; and they are expected to still increase in future. The scope of the conference includes findings on established and new Operations Research, Big Data and Analytics methods ineffective decision-making applications in Agriculture and in the Agri-food industry, including their supply chain, and also problems in Forestry and in Environment studies.

Important dates:

15 May 2020: Abstract submission deadline 01 Jun 2020: Paper notification 03-05 September 2020: Conference

Abstracts must be submitted electronically in English (as well as the presentation to be made at the conference) and in PDF format at the following link: https://easychair.org/conferences/?conf=bigdssagro2020.

SLS 2020 @ PPSN 2020 - Workshop on Stochastic Local Search

Leiden, The Netherlands, 5-9 September, 2020

Website

SLS 2020 - Workshop on Stochastic Local Search Held in conjunction with PPSN 2020

Contact - sls2020@univ-lille.fr SLS 2020 - https://sites.google.com/view/sls2020/ PPSN 2020 - https://ppsn2020.liacs.leidenuniv.nl/ Stochastic local search (SLS) algorithms are among the most powerful techniques for solving computationally hard problems in many areas of computer science, operational research and engineering. SLS techniques range from rather simple constructive and iterative improvement algorithms to general-purpose methods, also widely known as metaheuristics, such as ant colony optimisation, evolutionary computation, iterated local search, memetic algorithms, simulated annealing, tabu search and variable neighbourhood search.

The SLS 2020 workshop will give researchers interested in the principles and practice of the design, implementation and analysis of stochastic local search algorithms, with a focus on automated algorithm design and analysis approaches, the opportunity to meet, to present their latest research, and to discuss current developments and applications.

The SLS Workshop solicits contributions dealing with any aspect of engineering stochastic local search algorithms.

There are no format requirements. You can submit your ideas (sls2020@univ-lille.fr) by simple mail, or as PDF. Please indicate the format of your suggested contribution (talk, discussion, breakout, brainstorming, etc.) and how much time you suggest for this activity. The workshop is also a perfect venue to share your recently published work.

If you do not care about being listed in the conference proceedings, you can send us your ideas/contributions/position papers/suggested activities/... any time, ideally before **July 14, 2020**.

Please send your suggestions for presentations and/or discussions by e-mail to sls2020@univ-lille.fr

Italian Operations Research Society

ODS 2020 International Conference on Optimization and Decision Science



Rome, Italy, 8-11 September, 2020

Website

At this time, the Organizing Committee of the International Conference on Optimization and Decision Sciences 2020 wishes to thank all the people, friends and colleagues, here and abroad, for their words of concern and encouragement for the situation in Italy.

Although right now there are other major issues, in particular for our friends in the northern part of Italy, we believe that, from our side, we should try to keep working to have a successful meeting, possibly with some changes on our previous organization. For the above reasons, we extended the deadlines as much as possible to allow anyone to have more time for sessions organization, abstract and short papers submission, and, hopefully a more favorable situation to plan our future activities.

ODS 2020 aims at being a unique opportunity for researchers, and practitioners focused on today's problems of knowledge, growth, sustainability and operational excellence from various sectors (quantitative management, engineering, applied mathematics, statistics, computer science, economics, and finance, medicine), private and public companies, industries and policymakers, to present and share ideas, experiences and knowledge, as well as to enforce or creating a new cooperation network.

The conference theme is open in the wide field of analytics, optimization, problem-solving, and decision-making methods and their application in Production, Service, Knowledge, and IT Systems. However, a special focus is on Optimization in Artificial Intelligence and Data Science. The topics that may be addressed by the works submitted to the conference are reported below, the list is not exhaustive, and authors should not feel limited.

All researchers, academics, practitioners, and students working on the conference themes are invited to participate to ODS 2020 submitting a short paper or an abstract and organizing sessions. There is the opportunity to be a sponsor or exhibitor of the conference. Interested researchers can visit our web site or contact the conference secretariat (ods2020-airo.dss@uniroma1.it).

ODS 2020 aims at being an opportunity for researchers and practitioners from various sectors (applied mathematics, computer science, engineering, economics), private and public companies, industries and policymakers, to present and share ideas, experiences and knowledge, as well as to creating a point of contact among them.

Important Dates

- · May 1, 2020 Deadline for submission of sessions proposal
- · May 1, 2020 Deadline for short paper submission
- · May 24, 2020 Deadline for abstract submission
- · June 29, 2020 Contribution (short paper or abstract) acceptance notification
- · June 29, 2020 Deadline for early registration
- · July 19, 2020 Deadline for camera-ready paper

Croatian Operational Research Society

KOI 2020



Šibenik, Croatia, 23-25 September, 2020

Website

International Conference on Operational Research (KOI) brings together researchers and practitioners from various aspects of OR with the aim of establishing contacts, presenting scientific ideas and experiences.

Conference Contact

Croatian Operational Research Society Trg J. F. Kennedyja 6, HR-10000 Zagreb, Croatia E-mail: **koi@hdoi.hr** Zrinka Lukač, University of Zagreb Faculty of Economics and Business Trg J. F. Kennedyja 6, HR-10000 Zagreb, Croatia Tel: +385 1 238 3333 Fax: +385 1 233 5633

Keynote speakers

- * Ozren Despić, Aston Business School, UK
- * Sandi Klavžar, Faculty of Mathematics and Physics, University of Ljubljana, Slovenia
- * Yurii Nesterov, Catholic University of Louvain, Belgium
- * Marc Sevaux, ab-STICC, a CNRS laboratory, Université de Bretagne Sud

Special Session

Special session will be devoted to the 80th birthday of our esteemed member, Prof. Sanjo Zlobec from McGill University, Montreal, Canada. The session will be organized by Luka Neralić.

Workshop

Workshop will be organized and held by Prof. Ozren Despić from Aston Business School, UK.

Authors

Instructions for authors who wish to present a paper at the conference KOI 2020 should submit the extended abstract up to 250 words using the online submission system at http://hdoi.hr/koi-conference/koi-2020/

Deadlines

June 15, 2020 - Submission of abstracts July 01, 2020 - Notification of acceptance September 07, 2020 – Registration fee payment

International Conference on Computational Logistics (ICCL'20)

Enschede, Netherlands, 27-30 September, 2020

Website

The 11th Conference on Computational Logistics will be held September 27-30, 2020 at the University of Twente in Enschede, The Netherlands. In the tradition of the previous conferences, the conference will focus on the theory and applications of operations research, artificial intelligence, and management science to problems in logistics. The theme of this edition is **Optimization and Artificial Intelligence in Logistics Management**.

Important Dates

- · DEADLINE EXTENDED TO THE 25TH OF MAY: Submission deadline full papers (conference proceedings)
- · June 12, 2020: Submission deadline abstracts for presentation only
- · June 26, 2020: Notifications of acceptance (for both full papers and abstracts)
- July 15, 2020: Deadline for submission camera-ready paper
- · August 14, 2020: End of early registration (reduced conference fee)

Covid-19 note:

Our current expectation is that by the end of September (i) not all potential conference attendees are able to travel to The Netherlands and (ii) social distancing is required at the conference locations. Therefore, we are currently aiming at a joint offline/online conference. However, we are continuously monitoring the COVID-19 outbreak and its impact on the conference. So if changes or modifications are taken, we will speedily inform you.

Guidelines for paper submission

Two kinds of submissions are invited, i.e., a proposal can be submitted for:

- · Conference papers for publication in Springer's Lecture Notes in Computer Science (LNCS).
- · Abstracts for presentation only.

ICO 2020. 3rd International Conference on Intelligent Computing & Optimization 2020

Hua Hin, Thailand, 8-9 October, 2020

Website

Innovative optimization approaches have attracted many research scientists, decision makers, managers, executives, engineers, academicians, officers and practicing researchers in recent years as powerful intelligent computational techniques for solving several complex real-world problems.

The International Conference on Intelligent Computing and Optimization (ICO2020) highlights the latest research innovations and applications of algorithms designed for optimization applications within the fields of Science, Computer Science, Engineering, Information Technology, Management, Finance and Economics. Focusing on a variety of methods and systems as well as practical examples, this conference is a significant resource for post graduate-level students, decision makers, and researchers in both public and private sectors who are seeking research-based methods for modelling uncertain and unpredictable real-world problems.

Tutorials/Workshops/Special Sessions

Proposals should provide a focused lecture or scope on new and emerging topics within the scope of the conference. Accepted and presented papers will be published in the Conference Proceedings. All proposals should be submitted by electronic mail to: Prof. Igor Litvinchev, Nuevo Leon State University, Mexico igorlitvinchev@gmail.com Prof. Leo Mrsic, Algebra University College, Croatia leo.mrsic@algebra.hr

Posters/Demos

All ICO 2020 Posters & Demos should be submitted by electronic mail to: Dr. Koletino N Mpeta, North West University, South Africa kolentino.mpeta@nwu.ac.za and Prof. Gilberto Perez Lechuga, Autonomous University of the Hidalgo State, Mexico glechuga2004@hotmail.com

Paper Submission Website:

The submission Web page for ICO 2020 is https://easychair.org/conferences/?conf=ico2020

Important Dates

Workshops/Tutorial proposals 10 June 2020 Full paper/Poster/Demos 24 July 2020 Acceptance Notification 15 August 2020 Camera ready deadline 10 September 2020

Dagstuhl meeting on Data-Driven Combinatorial Optimization

Wadern, Germany, 11-16 October, 2020

Website

The most studied connection between optimisation and machine learning is continuous optimisation. However, an area beginning to be influenced in a new way by ML is combinatorial optimisation. This research area is studied for both its importance in theory (combinatorial optimisation problems are NP-hard problems), and for its importance in real-world decision problems, such as planning drivers and routes for a fleet of delivery vehicles. Combinatorial optimisation problems are studied in operations research (OR) and also traditionally in symbolic artificial intelligence (AI) such as constraint programming (CP) and satisfiability modulo theories.

This Dagstuhl Seminar builds on recent scattered initiatives for combining ML with CP, and with OR more generally, having the ambition to set the agenda for constraint-based 'Combinatorial Optimisation 2.0'. Mostly disjointed communities have focussed on different approaches to combinatorial optimisation. This division between, on the one hand, the OR and symbolic AI communities, and on the other, the ML and functional AI communities, is historically strong. While in recent years a dialogue between symbolic and functional AI communities has emerged, there remains little to no connection between the discrete OR and ML communities. CP is seen as a connecting bridge between OR and AI, and therefore the CP–ML dialogue as having potential to be particularly influential; indeed, recent attention indicates that the combination of CP and ML is very promising.

The structure of the seminar is group discussions to develop a research agenda. The seminar's discussions will begin with eight questions that help to define the synergistic frontier among ML, CP and OR: (1) What are the potentials and limitations of end-to-end solving of combinatorial optimisation by ML approaches? (2) How can CP and discrete optimisation models be acquired or refined from data? (3) How can CP methods and classical OR methods be enhanced by incorporating ML? (4) How can ML models be embedded within CP models? (5) How can OR—CP hybrid approaches benefit from recent ML ideas? (6) How can ML benefit from combinatorial optimisation

ideas? (7) How can combinatorial optimisation mitigate the weaknesses of ML methodologies? (8) What forms of human - in- the-loop modelling and solving are promising?

The key outcomes this Dagstuhl Seminar will aim for are (1) a research agenda, flowing from the above questions, (2) a journal special issue (tentatively in Artificial Intelligence, Constraints or INFORMS Journal of Computing), and (3) activities to support and expand interactions between the involved fields.

EWG HOpe, EURO working group on Humanitarian Operations

Fifth EURO HOpe mini conference

Helsinki, Finland, 14-15 October, 2020



SAVE THE DATE

The European Working Group on Humanitarian Logistics (EURO HOpe) and the HUMLOG Institute at Hanken School of Economics are planning the fifth EURO HOpe mini conference in Helsinki, Finland.

The main theme in 2020 is: Financial, Cash and Voucher Assistance in Humanitarian Supply Chains. Other topics including, but not limited to:

- Factors that influence modality selection
- Technology-based solutions for cash and voucher assistance
- Local procurement in humanitarian supply chains
- Market assessment and resilience of local supply chains and infrastructure
- The business models of preparedness and prevention for sustainable operations

We hope to be able to welcome researchers and practitioners to interesting presentations and discussion on how to improve humanitarian response in an increasingly complex and dynamic world.

Save the date! We are monitoring the COVID-19 situation and will send out the final confirmation and Call for Papers as soon as possible. We are keeping our fingers crossed that we will be able to meet you all in the autumn!

More information to follow!

EWG EU/ME, EURO working group on Metaheuristics

ICVNS - 8th International Conference on Variable Neighborhood Search



Abu Dhabi, UAE, 22-25 October, 2020

Website

The 8th International Conference on Variable Neighborhood Search (ICVNS 2020) will be co-organized by the Research Center on Digital Supply Chain and Operations Management (DSO) at Khalifa University, Abu Dhabi and the EURO Working Group on Metaheuristics (EWG EU/ME). The main goal of the ICVNS 2020 is to provide a stimulating environment in which researchers coming from various scientific fields can share and discuss their knowledge, expertise and ideas related to the VNS Metaheuristic and its applications. The aim of the 8th International Conference on VNS is to allow specialists and practitioners on Variable Neighborhood Search to effectively screen papers and participate in lively debates.

Deadlines

Submission deadline: **May 15, 2020**Notification to authors: July 15, 2020
Early registration deadline: August 1, 2020

Preliminary program schedule notice : October 1, 2020 Conference date : October 22, 2020 - October 25, 2020

Camera-ready due: November 15, 2020

NORS Annual Conference 2020

Trondheim, Norway, 18-19 November, 2020





The NORS Annual Conference aims to be a meeting place for the Norwegian Operations Research community for exchanging ideas and presenting ongoing research. We especially encourage PhD candidates to present their work.

The conference will be hosted at NTNU Trondheim on the occasion of Professor Gilbert Laporte receiving an honorary doctorate from NTNU on 20 November 2020. Gilbert Laporte has kindly agreed to give the closing plenary of the NORS Annual Conference.

The conference hopes to bring researchers, practitioners and students within Operations Research together to discuss industrial challenges, modelling approaches and/or solution methods. The program includes parallel sessions focusing on current problems in the industry, existing applications and ongoing research.

Key Information

Conference Dates:18-19 November 2020 (lunch-to-lunch)

Location:Trondheim

Abstract Submission: 1 September 2020 (deadline)

Registration:1 May 2020 (opens)

39th conference Colloquium on Combinatorics (Kolkom 2020)

Paderborn, Germany, 20-21 November, 2020

Website

Dear colleagues,

we invite you to the 39th conference "Colloquium on Combinatorics" (Kolkom 2020), which takes place at Paderborn University, on November 20-21, 2020.

The Colloquium on Combinatorics is a forum that brings together young researchers and well established scientists. The colloquium will cover all parts of Combinatorics and Discrete Mathematics in a broad sense, including combinatorial aspects in Algebra, Geometry, Optimization and Computer Science.

Keynote speakers are

Maria Chudnovsky (Princeton, USA); Daniela Kühn (Birmingham, UK); Bill Martin (Worcester, USA); Patrice Ossona de Mendez (Paris, France); Christian Stump (Bochum, Germany)

Abstract Submission: October 23, 2020

2020 IEEE Industrial Engineering and Engineering Management Conference

Singapore, 14-17 December, 2020

Website

www.IEEM.org

http://www.ieem.org/docs/IEEM2020_Callforpaper.pdf

IEEE International Conference on Industrial Engineering and Engineering Management (IEEM) is a leading international forum for the exchange, sharing and dissemination of the latest development in research and practice

in all fields related to industrial engineering and engineering management. The conference has been hosted by leading universities in Asia. The average attendance is 500 participants from 50 countries at each annual meeting.

This year, IEEM2020 will be held in Singapore from 14 to 17 Dec, 2020 at the Sands Expo® and Convention Centre at Marina Bay Sands (MBS). MBS is an award-winning event venue and integrated resort.

All submissions will be peer reviewed. Accepted papers will be published in the conference proceedings to be submitted to IEEExplore for inclusion. Abstract Only submission will also be accepted, but only full papers are reviewed and included in the conference proceedings.

Full Paper Submission: **1 Jun 2020** Notify Acceptance: 1 Aug 2020

Final Paper and Early bird registration: 1 Sep 2020

EWG/DSO Data Science meets Optimization

COSEAL workshop

Bruges, Belgium, 23-24 August, 2021



EWG PATAT, EURO Working Group on Automated Timetabling

13th International Conference on the Practice and Theory of Automated Timetabling



Bruges, Belgium, 24-27 August, 2021

With the outbreak of the novel coronavirus, we regret to inform you that the 13th International Conference on the Practice and Theory of Automated Timetabling and co-located COSEAL Workshop have been postponed and will now take place in August 2021.

Publications





Special Issue: Call for Papers on Disruptive Technologies and Operations Management

Guest Editors: Subodha Kumar, Vijay S. Mookerjee, Tsan-Ming Choi, Xiaohang Yue Deadline for submission: July 31, 2020

Website

Production and Operations management has entered Industry 4.0, making smart and data driven operations a reality. Technologies such as Artificial Intelligence (AI), Blockchain, and 3D printing, are giving rise to new opportunities and their associated operational challenges. Operational intelligence is being embedded into interconnected devices supported by cloud and mobile computing. Digital production technologies and IT-enabled management processes are generating a massive amount of data that are being leveraged to improve the operational capabilities and the long-run performance of businesses. Examples include the cheaper and faster coordination of global supply chains and the improved flexibility and customization of products and services.

Looking into the future, it is clear that Industry 4.0 technologies (e.g., data analytics, big data, AI, etc.) have changed the way many companies operate. While earlier waves of automation also had profound effects on business and society, current Industry 4.0 technologies strike at the very heart of what humans preserve, namely, knowledge work. As these technologies further penetrate knowledge work to replace humans, the worry is that there will be large-scale lay-offs, together with data security and privacy issues. To be specific, in the coming Industry 5.0 era, in order to create real value for humans, operations management should strike a balance between machines and humans, and focus on more holistic practices and social responsibility. With a view toward Industry 5.0, we invite submissions that study operational challenges and solutions aimed toward the so called "human-machine reconcile."

The Production and Operations Management Journal recently created a new department on "Disruptive Technologies and Operations Management." This special issue aims to attract submissions that explore operations management challenges and solutions in Industry 4.0 (where the focus is on operational challenges that arise from disruption) as wells as Industry 5.0 (where the focus is on reconciling humans and machines).

We welcome submissions that examine operational problems that arise outside the traditional boundaries of manufacturing and service operations. These include areas such as finance, information systems, marketing, accounting, etc. The submission can use any method and methodological tradition that serves as an appropriate framework to analyze problems: analysis of data, mathematical analysis, behavioral theories, etc. We expect the study to address a new (and potentially game-changing) phenomenon, with a sufficient level of rigor that is consistent with the high standard of the journal.



Special Issue: Call for Papers on Algorithms for Graphs and Networks

Guest Editor: Rhyd Lewis

Deadline for submission: September 30, 2020

Website

We cordially invite you to submit high-quality papers to this special issue of Algorithms https://www.mdpi.com/journal/algorithms (2019 Scopus CiteScore of 1.98).

Networks and graphs are structures made up of objects in which some pairs of objects are in some sense "related" to one other. Graphs are used in a surprisingly large number of problem areas including social networking, chemistry, scheduling, modeling the spread of disease, vehicle routing, electrical engineering, and computer networking. This special issue will present recent advances in the area of graphs and networks, focusing particularly on optimization problems in graphs together with appropriate algorithms and heuristics for tackling them.

We welcome articles presenting original research and also those surveying recent advances in the area.

If you are interested in submitting a paper on a topic other than those listed here, please contact the **guest editor** by email to give a brief overview of your paper proposal.

Manuscripts should be submitted on-line at www.mdpi.com before the above deadline. All papers are subject to a single-blinded peer-review process. Submitted manuscripts should not have been published previously, nor be under consideration for publication elsewhere. Extended versions of conference papers are acceptable provided that the submission is augmented with at least 30% new material (in this case you are asked to submit a document detailing the original conference paper and highlighting the new material in the paper). A guide for authors and other relevant information for submission of manuscripts is available at https://www.mdpi.com/journal/algorithms/instructions.

Please note that Algorithms is an international open access journal. As a result, all accepted submissions are subject to an article processing charge of 1000 CHF (approximately 1000 USD or 950 Euros) on publication.



Special Issue: Call for Papers on Fuzzy Systems Toward Human-Explainable Artificial Intelligence and Their Applications

Guest Editors: Zehong (Jimmy) Cao, Chin-Teng Lin, Yong Deng, Gerhard-Wilhelm Weber

Deadline for submission: October 31, 2020

Website

Fuzzy systems are one of the most significant advances in computational intelligence, and have performed excellent fuzzy modelling capabilities in many data science scenarios, as they consist of human reasoning and decision models. With the cooperation between systems and algorithms based on fuzzy rules, it helps to understand further artificial intelligence, especially accuracy and interpretability in machine learning, to obtain human-explainable artificial intelligence models.

At present, the goal of artificial intelligence-based models is not only to achieve the highest possible accuracy, but also to be interpretable to its users and developers. In this sense, fuzzy systems retain the original nature of revealable intelligibility and improve their modelling capabilities, leading an advantage over other approaches in processing human-explainable artificial intelligence.

The purpose of this special issue aims to gather a series of outstanding studies on fuzzy systems toward the field of artificial intelligence explainable by human reasonings. This will provide a snapshot of the latest advances in the contribution of the emerging field of human-explainable artificial intelligence.

All authors should read 'Information for Authors' before submitting a manuscript at https://cis.ieee.org/publications/t-fuzzy- systems/tfs-information-for-authors

Submissions should be through the IEEE TFS journal website http://mc.manuscriptcentral.com/tfs-ieee.

Submissions should also be in the correct format https://journals.ieeeauthorcenter.ieee.org/create-your-ieeejournal- article/authoring-tools-and-templates/ieee-article-templates/templates-for-transactions/

It is essential that your manuscript is identified as a Special Issue contribution:

- · Ensure you choose 'Special Issue' when submitting.
- · A cover letter must be included which includes the title 'Fuzzy Systems Toward Human-Explainable Artificial Intelligence and Their Applications'.



applied sciences Special Issue: Call for Papers on Cyber Security, **Smart Cities and Big Data Optimization in Energy**

Applications

Guest Editors: Ugo Fiore, Pandian Vasant, Gerhard-Wilhelm Weber, Joshua Thomas

Deadline for submission: October 31, 2020

Website

The purpose of this Special Issue on Cyber Security, Smart Cities, and Big Data Optimization is to deeply inquire, holistically reflect, and comprehensively expose the current and emerging cutting edge technology in important fields of investigation and facilities for original, innovative, and novel real-world applications of Optimization in the modern world related to the emerging areas of the Big Data, Data-based Cryptography and its emerging applications to individuals, groups, cities, countries, etc.

Contributing authors of this special issue will be scientists and practitioners from all over the world; they use and further refine the deep model-based methods of mathematics and the less model-based, also so-called smart or intelligent algorithms with their roots in the engineering disciplines, in computer science, and informatics. Today, these techniques and approaches meet and interact in many centers of research all over worldwide to overcome misunderstandings and misperceptions between these two academic avenues.



Special Issue: Call for Papers on Behavioural and Societal Aspects of Decision Making in Energy

Systems and Markets

Guest Editor: Valentin Bertsch

Deadline for submission: November 15, 2020

Website

Many countries worldwide have adopted policies to support the expansion of renewable energy sources aimed at reducing greenhouse gas emissions, combating climate change, and, more generally, establishing a globally sustainable energy system. As a result, energy systems around the world are undergoing a process of fundamental change and transformation that goes far beyond the technological dimension. While energy systems models have been developed and used for several decades to support decision makers in governments and companies, these models usually focus on the techno-economic dimension, whereas they fall short in addressing and considering behavioural and societal aspects of decisions related to technology acceptance, adoption, and use. In fact, however, it is often the societal dimension that comes with the greatest challenges and barriers when it comes to making such a socio-technical transformation happen in reality.

This Special Issue therefore seeks to attract submissions that feature sound, quantitative state-of-the-art energy systems modelling and analysis techniques that are capable of considering behavioural and societal aspects of decision-making in the energy sector at the individual, institutional, or societal level. In particular, interdisciplinary collaborations and submissions with an integrative perspective are welcome. This may involve, but is not limited to, linking energy systems modelling with methods of (multi-criteria) decision analysis or life-cycle sustainability assessment for improved support of decision-making processes and consideration of criteria beyond technoeconomic aspects. The main criteria for paper acceptance are academic excellence and methodological originality, as well as policy relevance and the breakthrough character of the findings presented.



Applied Soft Computing

Special Issue: Call for Papers on Intelligent Solutions for Efficient Logistics and Sustainable Transportation

Guest Editors: Patricia Ruiz, El Ghazali Talbi, Pascal Bouvry, Jamal Toutouh

Deadline for submission: November 15, 2020

Website

Over one-quarter of the global CO2 emissions are due to the transport sector, and among all means of transport, the road accounts for 74%. Solutions for reducing the emissions are vital for reaching the global climate target, set by the COP 21 Paris Agreement. However, road transportation is the backbone for most of the countries' economy, and changes might have influence on many other related sectors. It will require a lot of public effort in terms of establishing policies and providing financial assistance, passengers' efforts in terms of changing their mobility habits, and industry efforts in terms of a complete update in their logistic process. Therefore, special attention is required for providing an integrated solution that leads to a sustainable and efficient road transport system whose ultimate goal is to improve passenger and trade mobility, strengthen cohesion and economy, and increase competitiveness while mitigating environmental, social and economic impacts. In this sense, any of these scenarios need to address the difficult challenges which may potentially require the use of intelligent solutions and optimization strategies to achieve the expected goals.

The purpose of this special issue is to collect the main and recent trends targeting the design of novel innovative solutions based on cutting-edge artificial intelligence tools, optimization strategies and relevant high-impact applications in sustainable road transportation and efficient logistics.

All submitted papers related to the listed topics will be considered for publication in this special issue, provided they are recommended for publication after the review process. All manuscripts submission and review will be handled by Elsevier System https://ees.elsevier.com/asoc/default.asp. All papers should be prepared according to ASOC Guide for Authors.



Special Issue: Call for Papers on Algorithms for Shortest Paths in Dynamic and Evolving Networks

Guest Editors: Daniel Delling and Christos Zaroliagis

Deadline for submission: November 30, 2020

Website

Contemporary technological infrastructures are dominated by a multitude of networks (transportation networks, social networks, communication networks, e-commerce networks, power networks, etc.) that are typically of a very large scale and impose as a routine task the computation of min-cost paths, while their characteristics usually evolve with time. The dynamicity and temporality of the network characteristics is often depicted by some kind of predetermined dependence of the metric on the actual time that each resource is used (e.g., traversal time of individual segments in road networks, packet-loss rate in IT networks, arc availability in social networks, etc.).

The aim of this Special Issue is to seek new algorithmic approaches for computing the shortest paths in networks that change over time for several reasons. A typical (but non-exhaustive) list includes network changes either due to the nature of an underlying metric (time-dependent networks), or the insertion/deletion of nodes and arcs (dynamic networks), or the availability of arcs at specific time slots (temporal networks), or the uncertainty of arc costs (stochastic networks), or the fact that each arc is equipped with more than one arc-cost vector (parametric networks).

Original contributions are solicited on new shortest-path algorithms on dynamic and evolving networks, which can belong to the broad spectrum of design, analysis, and engineering of algorithms, and include theoretical design and analysis, extensive experimentation and algorithm engineering, and heuristics. Moreover, high-quality survey contributions will also be considered.

Manuscripts should be submitted online at www.mdpi.com by registering (www.mdpi.com/register) and logging in (www.mdpi.com/login) to this website. Once you are registered, click here (https://susy.mdpi.com/user/manuscripts/upload/?journal=algorithms) to go to the submission form.

Submitted manuscripts should not have been published previously, nor be under consideration for publication elsewhere, except conference proceedings papers. In the latter case (of conference proceedings papers), the submitted manuscript should provide at least 40% new content.



Special Issue: Call for Papers on Sustainable Management and Multiple Attribute Decision Making

Guest Editors: Maria Isabel Gomes and Ana Pires
Deadline for submission: November 30, 2020

Website

The 2030 Agenda for Sustainable Development, proposed by the United Nations in 2015, set 17 goals (https://sustainabledevelopment.un.org/?menu=1300) that challenge nations to act in a global partnership towards a better future. The aim of this Special Issue is to bring together recent challenges and scientific developments addressing decision making within the context of the Sustainable Development Goals (SDG). All these stakeholders involved in the decision-making process do not all share the same objectives. Operation research models can play a fundamental role in reaching decisions for a better future.

The objective of this Special Issue is to publish rigorous research focusing on the integration of different perspectives in decision making towards "Good Health and Well-Being", "Sustainable Cities and Communities", and "Responsible consumption and production" goals. Works focusing on the other goals are also welcomed.

Manuscripts should be submitted online at www.mdpi.com by registering and logging in to this website. Once you are registered, click here to go to the submission form Manuscripts can be submitted until the deadline. All papers will be peer-reviewed. Accepted papers will be published continuously in the journal (as soon as accepted) and will be listed together on the special issue website. Research articles, review articles as well as short communications are invited. For planned papers, a title and short abstract (about 100 words) can be sent to the Editorial Office for announcement on this website.

Prizes and Awards







ROADEF/EURO Challenge 2020

Grid operation-based outage maintenance planning

Website

Thanks to the success of the previous challenges, the French Operational Research (OR) and Decision Support Society (ROADEF) organizes exceptionally jointly with the Association of European Operational Research Societies (EURO) the ROADEF/EURO challenge 2020 dedicated to maintenance planning optimization problem in collaboration with RTE.

This challenge is *open* to everyone, and particularly to young researchers, excluding people professionally involved with the industrial partners.

The goal of this challenge has multiple aspects.

Firstly, it allows some of our industrial partners to follow recent developments in the fields of Operations Research and Decision Analysis.

Secondly, through the junior category young researchers have the opportunity to face up to a complex industrial optimization problem. The challenge will give them an opportunity to explore the requirements and difficulties encountered in industrial applications. We hope that this challenge will help to establish a permanent partnership between manufacturers and young scientists on industrial-sized projects which require both high scientific qualification and the real-life practices in companies making use of decision analysis.

Thirdly, through the senior category, this challenge allows qualified researchers to demonstrate their knowledge and share their know-how and expertise on the practical problems. This also gives them the opportunity to establish partnerships with industrial companies.

Lastly, a **scientific prize** dedicated to qualitative submissions is proposed.

June, 01 2020 (Optional) Sprint on first instances. Deadline for submitting computational results table, and solutions files.

June, 26 2020 Sprint results and award.

December, 31 2020 Deadline for registration.

December, 31 2020 End of qualification phase. Deadline for submitting a first version of computer program, computational results table and a short (2 pages) description of the method, including the characteristics of the computer used.

February, 20 2021 ROADEF 2021 Announcement of the qualification results. Set of B instances available. Beginning of the final phase.

June, 01 2021 Deadline for submitting final program, computational results table and an extended abstract (5 pages) describing the method, including the characteristics of the computer used.

July, 14 2021 EURO 2021 Announcement of the final results with ranking on B and X instances.

November, 01 2021 Deadline for paper submission for scientific prize.

February 2022 ROADEF 2022 Final Results Awards and Scientific Prize Awards. Presentation of the finalists' works and prize award.

Upcoming Conferences

Click on the table below to download a pdf of upcoming events

18th May 2020	Mixed Integer Programming Workshop 2020 Feat, DAMniversary	ONUNE	
7th-29th May 2020	ICDSST 2003- IWG-DSS 6th International Conference on Decision Support System Technology	ONUNE	18th December, 2019
th-7th Aune 2000	IPCO Summer School	ONLINE	27th March 2020
th-9th June 2020	20th Halfa Workshop on Graph Theory, Combinatorics and Algorithms	ONUNE	27th April 2020
th June 2020	International Workshop on Advancing Resilience in Enterprise Architecture and Decision Support Systems (AREADS)	Grenoble, France	1st March 2020
th-10th Ame 2020	Conference on Integer Programming and Combinatorial Optimization IPCO XXX	ONUNE	29th November 2009
th-10th June 2020	IWOCA 2020 - 31st International Workshop on Combinatorial Algorithms	Bordesus, France	1st February 2020
Sth-17th June 2020	CTW2020: 18th Cologne-Twente Workshop on Graphs and Combinatorial Optimization	luchia, Italy	29th March 2020
6th-19th June 2020	19th International Symposium on Dynamic Games and Applications	Parto, Portugel	15th May 2020
8th June 2020	9th Annual Koc University Healthcare Operations Workshop	Istanbul, Turkay	36th February 2020
Sth-26th June 2020	2nd EUROYoung Workshop	Porto, Pertugal	1st April, 2020
8th June-4th July 2020	Swedish Serviner School in Computer Science (SSCS 2000)	Stockholm, Sweden	13th March 2020
8th June-10th July 2020	The Machine Learning Summer School	Tübingen, Germany	13th February 2020
	Regularization Methods for Machine Learning (NegMt)		20th March 2020
9th June-Srd July 2020		ONUNE	
th-10th July 2020	International Conference "Mathematical Optimization Theory and Operations Research" (MOTOR 2020)	Novesbirsk, Russia	1st March 2020
th-17th Auly 2020	EURO PND School on MCDN/MCDM	Ankara, Turkey	1st February 2020
th-12th July 2020	2000 Senetic and Evolutionary Computation Conference (ISECCO 2005)	ONUNE	30th January 2020
0th-19th July 2020	EURO PhD School on Data Driven Decision Making and Optimization	Sevillo, Spain	15th January 2020
1th July 2020	Workshop Data Science meets Outimisation, DSO BTBCAU	ONUNE	30th June 2020
5th-17th July 2020	4th International Conference on Quality Engineering and Management (ICQEM)	Braga, Portugal	30th April 2020
9th-23nd July 2020	The 6th International Conference on Machine Learning, Optimization & Data Science	Siena, Italy	30th April 2020
5th-31st July 2020	ORAHS 2020 - 46th International Conference on OR applied to Health Service	ONUNE	29th February 2020
th-7th August 2020	KASD 2020	West Java, Indonesia	15th June 2020
Pth-14th August 2020	Modeling and Optimization: Theory and Applications (MOPTA 2020)	Pennsylvania, USA	28th June 2020
Rth-26th August 2020	FWIS - International Workshop on Lot Sidne	Oxio, Norway	15th May 2020
9th August 2000	12th Multidisciplinary Workshop on Advances in Preference Handling (M-PREF 2020)	Santiago de Compostela, Spain	6th March 2020
9th-30th August 2020	EWG CRD Workshop 2020, Data Technologies & Analytics for Sustainable Development	Magaliesburg, South Africa	1st June 2020
0th August-2nd September 2020	CRSSA Conference 2001	Magallesburg, South Africa	1st June 2020
0th August-2nd September 3020	INFORMS Telecommunication & Network Analytics Conference 2000	Berlin, Germany	22nd June 2020
1st August-4th September 2020	25th edition of the IMP TC7 Conference: Sestern Modelling and Optimization	Quito, Equador	27th March 2020
rd-5th September 2020	VI Workshop on Optimization Under Uncertainty in Sustainable Agriculture/Agrifood Industry and IV BigDSS Agro Conference	ONLINE	15th May 2020
th-9th September 2020	SLS 2020 @ PPSN 2020 - Workshop on Stochastic Local Search	Leiden, The Netherlands	14th July 2020
th-9th September 2020	13th International Workshop on Computational Optimization (WCO20)	Sofia, Bulgaria	15th May 2020
th-10th September 2020	Railways 2000: The 5th International Conference on Railway Technology: Research, Development and Maintenance	Maliarca, Spain	28th February 2020
th-11th September 2020	Twenty-Sixth Conference on Principles and Practice of Constraint Programming (CP 2020)	Louisin to Neuve, Belgium	24th May 2020
th-11th September 2020	QDS 2020, the International Conference on Optimization and Decision Science	Rome, Italy	24th May 2020
	Logistics Research Network Conference	Candiff, Wales	26th May 2020
th-11 September 2020			
4th-18th September 2020	12th International Conference on Parametric Optimization and Related Topics (paragg (RE))	Augiburg, Germany	1st June 2020
4th-26th September 2020	CO@Work 2020	Berlin, Germany	
6th-18th September 2020	23rd EURO Working Gross on Transportation EWGT 2020	Paphos, Cyprus	6th March 2020
Oth-23rd September 2020	XVII Symposium on Operational Research (SYM-OP-6 2020)	Eraljevo, Serbia	33st May 2020
Oth-23rd September 2020	23rd international IEEE Conference on Intelligent Transportation Systems (IEEE ITSC 2020)	Rhades, Greece	8th March 2020
Srd-25th September 2020	18th International Conference on Operational Research 601 2020	Sibersik, Croatia	15th June 2020
7th-30th September 2020	International Conference on Computational Logistics (ICCL'20)	Enschede, Netherlands	25th May 2020
8th-29th September 2020	3rd conference of the EURO Working Group on the Practice of Operations Research	Berlin, Germany	15th December 2019
8th-30th September 2020	Training School on Mixed-integer games (MING2000)	Maastricht, The Notherlands	30th June 2020
h-9th October 2020	ICO 2020, 3rd International Conference on Intelligent Computing & Optimization 2020	Hua Hin, Thailand	24th July 2020
Ith-16th October 2020	DapStuhl meeting on Data Driven Combinatorial Optimization	Wadern, Germany	
4th-15th October 2020	Eith EURO HDae mini conference	Holsinki, Finland	
6th-16th Oxtober 2020	18th International Logistics and Supply Chain Congress (LMSCM2020)	Gazianteg, Turkey	35st May 2020
0th-22nd October 2020	2nd African Industrial Engineering and Operations Management Conference	Harano, Zimbabwe	30th June 2020
Ind-25th October 2000	ICVNS - 8th International Conference on Variable Neighborhood Search	Abu Dhabi, UAE	15th May 2020
6th-28th Oxtober 2020	ANTS 2020 12th International Conference on Swarm Intelligence	Barcelona, Spain	1st May 2020
7th-31st October 2020	META 2020 International Conference on Metaheuristics and Nature Inspired Computing	Marrakech, Morocco	24th April 2020
th-9th November 2020	DAZPL 2009 (From Multiple Criteria Decision Aid to Preference Learning)	Trento, Italy	22nd August 2020

Contact Us

Do you have an item to be included in the next newsletter? Just contact us at office@euro-online.org. We reserve the right to edit submissions to suit the presentation and available space.





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