Joint Conference GDN & ICDSST 2024
Call for Papers & Participation
https://gdnicdsst2024.fe.up.pt/

24th International Conference on Group Decision and Negotiation & 10th International Conference on Decision Support System Technology
3 - 5 June 2024, Porto, Portugal

Main Theme: Human-Centric Decision and Negotiation Support for Societal Transitions

Venue: FEUP – Faculty of Engineering of the University of Porto, Porto, Portugal

Call for papers

You are invited to participate in the Joint Conference in Group Decision and Negotiation & Decision Support Systems Technology 2024 (GDN & ICDSST 2024).

The Joint Conference will gather the 24th International Conference on Group Decision and Negotiation, organized by the GDN Section of INFORMS, and the 10th International Conference on Decision Support Systems Technology, organized by the Euro Working Group on Decision Support Systems (EWG-DSS), from the EURO Association. The conference will be held at the Faculty of Engineering of the University of Porto, in Porto, Portugal, from 3 to June 5th 2024. The Joint Conference will have as its main topic: *Human-Centric Decision and Negotiation Support for Societal Transitions*.

The Organising Committee invites researchers, educators, developers, specialists, and other professionals in the related areas of decision-making and negotiation, including its methodologies and technologies, as well as application-oriented practitioners directed to the implementation of solutions for decision support challenges, to submit their work to the Joint Conference in Group Decision and Negotiation & Decision Support Systems Technology 2024.

Context

In a time when technology is rapidly evolving, decision-makers face two major challenges: (1) using technology to improve the decision process, and (2) ensure that decisions really support the best interest of the actors involved. On the one hand, the evolution of machine learning and AI offers incredible benefits, on the other hand, we, as technology creators, must ensure that humans remain the main beneficiaries of new services, software, and policies.

The transition period society is going through brought even more complexity to the decision processes by increasing uncertainty regarding the future. Whatever is our research focus (climate, energy, AI, automation, information and communication technology, etc.), change, transition, and challenges are recurrent. Add uncertainty to the mix and we have highly complex decisions processes, with several interested actors and multiple levels of goals. This recurring uncertainty has impacts on economics, employment, demographics, politics, and other societal concerns.

At this joint conference, we will promote discussions on the human and technological aspects of decision-making processes to build bridges between the two domains:

1- From the human perspective, research should ensure that humans remain at the centre of the decisions, with participatory and negotiation processes that promote co-creation and co-design of technology, services, and regulations. Such reliable decision processes increase trust and fairness of the decisions.

2- From the technological perspective, research must demonstrate that technology can be trusted and that proposed solutions are safe, inclusive, and fair.

These two perspectives are brought to the conference from the experience that each group has in the decision-making domain.

Group Decision and Negotiation

The field of Group Decision and Negotiation focuses on decision processes with at least two participants and a common goal. Such processes are complex and self-organising, and constitute multi-participant, multi-criteria, ill-structured, dynamic, creative, and often evolutionary problems. Major approaches include:

- Information systems, in particular negotiation support systems (NSSs) and group decision support systems (GDSs);
- Cognitive and behavioural sciences as applied to group decision and negotiation;
- Conflict analysis and resolution;
- Applied game theory, experiment, and social choice;
- Artificial intelligence;
- Management science as it relates to group decision making and negotiation.

Many research initiatives combine two or more of these approaches.

Group Decision and Negotiation can be performed in an intra-organisational as well as an inter-organisational context. Both consist of complex processes, including preference elicitation, proposals and counter-proposals, preference adjustment, and choice. Communication and decision making are the two key process steps in Group Decision and Negotiation, and thus require sophisticated support in many ways.

Application areas of Group Decision and Negotiation include intra-organisational and inter-organisational coordination (as in operations management and integrated design, production, finance, marketing, and distribution functions, such as coordination of all phases of the life cycle of a product), computer-supported collaborative work and meetings, electronic negotiations, including negotiating agents and negotiation support systems, labour-management negotiations, inter-organisational, intercultural negotiations, environmental negotiations, and many others.

Decision Support Systems Technology

Decision support systems assume an important role in ensuring that the decision-makers really get the best information, knowledge, and support in designing the correct solutions. Decision Support Systems (DSS) are designed to assist policymakers (and not only) to tackle issues that are increasingly complex, allowing to consider multiple objectives, multiple actors, offering robust solutions based on mathematical theoretical models, such as multicriteria decision analysis, optimization algorithms, heuristics, or simple data visualization based on data mining analysis. Moreover, DDS require great amount of data to offer information, knowledge, and real support to decision-makers.

In the modern digital age, theoretical and technological advances allow DSSs to better model human decision-making capabilities. Societal dependence on digital platforms, and the "real time information" offerings, accentuate the demand for a customized and intelligent decision support able of meeting the needs of modern industry, business, and society.

Submission and publication process

This year, there will be three types of submissions (abstracts, extended abstracts, and full papers) and two types of presentations (oral and poster). When submitting your work, the following publication options will be available:

- ***Lecture Notes in Business Information Processing (LNIBP) book of proceedings – full papers for oral presentation***
  The authors choosing this option must submit a full paper up to 12 pages using the Springer template. Two Springer proceedings will be published: GDN Series and EWGDSS Series. **Deadline: January 8th, 2024.**
- ***Local book of proceedings***
  - ***Abstracts – for poster presentation***
    500-word abstracts are intended to pitch poster presentations. Abstracts and related posters should follow the conference poster guidelines. **Deadline: January 8th, 2024.**
  - ***Extended abstracts and full papers – for oral presentation***
    Extended abstracts should be up to 3000 words and use the conference template. **Deadline: January 8th, 2024.** After acceptance, authors may submit a revised version of the extended abstract or expand it to a full paper up to 6000 words. **Deadline: April 30th, 2024.**

All submissions may refer to ongoing or complete works, are subjected to the evaluation and acceptance of the Programme Committee, and will be handled using the EasyChair platform.

After the conference, authors of extended abstracts and full papers submitted to the local book of proceedings may be invited to submit a full paper to the conference's special issues by the corresponding guest editors.

Doctoral Consortium

Researchers working toward a Ph.D. in GDN or DSS are invited to submit proposals for the Doctoral Consortium (DC). This event provides an opportunity for graduate students to explore their research interests in an interdisciplinary workshop under the guidance of a panel of distinguished experts in the field. During the DC, students present their research work in a relaxed and supportive environment, receive feedback and suggestions from experienced faculty members, discuss concerns about research, and network with faculty, peers, and future colleagues. The DC submissions should include the following information: motivation, including research aims and research questions, theoretical foundations, research approach, preliminary results (if applicable), an overview of the schedule, and an indication of the current state. They should adhere to the guidelines and templates for extended abstracts and full papers. Accepted submissions will be included in local proceedings, and they will remain free of copyright. The Doctoral Consortium will take place on Sunday, June 2nd. **Deadline: March 17th, 2024.**

Themes / Topics

Suggested topics include, but are not limited to, decision theory, systems theory, participatory and collaborative methodologies, technological tools (from design to implementation), societal and behavioural perspectives, and applications and case studies.

The topics are organized in conference streams, as listed below.

Technology as a support tool
- Multicriteria decision-making
- Modelling and simulation using software agents
- Machine learning
- Multi-agent systems
- Virtual worlds and environments
- Decision support systems: advances and future trends
- Multi-attribute and multi-criteria decision making
- Human-computer interaction
- Big data analytics and data science: data and text mining.
- Knowledge management, acquisition, extraction, visualisation and decision making
- Machine learning, natural language processing, artificial intelligence
- Trustable and reliable automated systems
- Humanizing artificial intelligence

People as active participants
- Behavioral aspects of group decision and negotiation
- Decision and negotiation analysis
- Conflict analysis and resolution
- Game theory and social choice
- Collaborative decision making and collaborative information technologies
- Users' empowerment through collaborative platforms
- Group support systems
- Negotiation support systems
- E-negotiation platforms and systems
- Interaction of human and software agents
- Social network analysis for decision-making
- New methods and technologies for global crisis management
- Immersive analytics for decision-making

Awards

EWG-DSS Award

Students and young researchers participating in ICDSST 2024 will be considered for the ***EWG-DSS 2024 Award***, to be announced in 2025. This award chooses the best and most innovative among presented works, to be rewarded with a modest prize in money, sponsored by the EWG-DSS annual budget. The *EWG-DSS Award* was launched in 2011 as a motivating research initiative for young researchers to submit and present their work at the EWG-DSS annual conferences.

GDN Awards

Participants in the GDN 2024 will be considered for the *GDN 2024 Awards*, in the following categories:

- ***Conference paper awards***
  - ***GDN Springer Best Young Researcher Awards***

  Eligible authors are young researchers who have not completed the PhD. Young researchers must be the first author of the papers (supervisors can be co-authors) and the presenters at the conference. The papers must be submitted as full papers to the Lecture Notes in Business Information Processing (LNIBP) book of proceedings. The prize is $300 for the winner and $200 for the runner-up.

  - ***GDN Springer Best Paper Award***

  Eligible papers must be submitted as full papers (not as abstracts or extended abstracts). Selected papers may be invited to be submit an extension version of the paper to the INFORMS "Group Decision and Negotiation Journal" published by Springer (GDN journal). The prize is $600 for the winner and $400 for the runner-up.

Conclusion

Researchers, academics, practitioners, students, and all professionals around the world interested or involved in group decision making and decision support are welcome to submit their work to the conference. In addition, all EWG-DSS members and collaborators from other EURO WGs and DSS Communities, and all GDN members and collaborators from other INFORMS sections who have consistently contributed to the research in the Group Decision and Negotiation and Decision Support Technology are highly encouraged to submit their papers and participate in the conference.

For further information, contact the conference chairs: gdnicdsst2024@fe.up.pt.