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Group Decision and Negotiation


A Multidisciplinary Perspective

20th International Conference
on Group Decision and Negotiation, GDN 2020
Toronto, ON, Canada, June 7–11, 2020
Proceedings

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Preface

The Annual International Conferences on Group Decision and Negotiation have provided a stimulating environment for the dissemination of the state-of-the-art knowledge in the field of group decision and negotiation, allowing for intense discussions among participants and the exchange of ideas and critical comments for further improvement. The series of conferences has been held every year since 2000 (with one exception, in 2011).

The 20th International Conference on Group Decision and Negotiation (GDN 2020) was scheduled to be held at Ryerson University, Toronto, Canada, during June 7–11, 2020. However, due to the COVID-19 pandemic, when we faced a global health crisis, the Council of the Group Decision and Negotiation (GDN) Section, Institute for Operations Research and the Management Sciences (INFORMS), and GDN 2020 general and program chairs most regretfully decided to cancel GDN 2020 on March 25, 2020. The safety and wellbeing of our GDN community members and their families are of paramount importance.

At the time of conference cancellation, the preparation for GDN 2020 almost reached the final stage. We received 74 submissions. Notwithstanding unprecedented circumstances, we remained committed to the publication of conference proceedings.

In total, 74 papers were classified into 7 different streams, covering a wide range of topics related to group decision and negotiation. After a thorough review process, 14 of these papers were selected for inclusion in this volume entitled *Group Decision and Negotiation: A Multidisciplinary Perspective*.

This volume is organized according to four main streams of the conference that demonstrate the variety of research that was submitted to GDN 2020:

- The stream on “Conflict Resolution” brings together different research and application areas in investigating strategic conflict, including the graph model for conflict resolution (GMCR), composition of probabilistic preferences, and analysis of disputed territories
- The “Preference Modeling for Group Decision and Negotiation” stream focuses on methodological issues for supporting groups of decision-makers and negotiators in eliciting preferences
- The “Intelligent Group Decision Making and Consensus Process” stream includes analyses of managing incomplete information, opinion dynamics, and decision rule aggregation approaches
- The stream on “Collaborative Decision Making Processes” contains an ontology for collaborative decision making and a novel decision support system for collaborative project ranking

The preparation of this volume required the efforts and collaboration of many people. In particular, we would like to thank the honorary chair of GDN 2020, Gregory Kersten, and the general chairs of GDN 2020, Keith W. Hipel, Adiel Teixeira de

Almeida, and Rudolf Vetschera, for their contributions to the GDN Section and GDN 2020. Special thanks also go to all the stream organizers: Liping Fang, Keith W. Hipel, and D. Marc Kilgour (Conflict Resolution); Tomasz Wachowicz and Danielle Costa Morais (Preference Modeling for Group Decision and Negotiation); Zhen Zhang, Yucheng Dong, Francisco Chiclana, and Enrique Herrera-Viedma (Intelligent Group Decision Making and Consensus Process); Pascale Zaraté (Collaborative Decision Making Processes); Bilyana Martinovski (Emotion in Group Decision and Negotiation); Haiyan Xu, Shawei He, and Shinan Zhao (Risk Evaluation and Negotiation Strategies); and Mareike Schoop, Philipp Melzer, and Rudolf Vetschera (Negotiation Support Systems and Studies (NS3)).

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April 2020

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