Call for Papers

Annals of Operations Research

Special Issue: Artificial Intelligence in Operations Management


The recent and exponential increase in the number of adopters of digital technologies, thanks to information and communications technology (ICTs) advances, has been drastically changing the field of operations management (OM). Even though it has been already studied for decades, artificial intelligence (AI) has gained high momentum only in the recent decade, in the wake of an unprecedented development of the Internet and social networks. So, organizations definitely started to incorporate AI techniques into the management of their various operations.

The main objective of this special issue (SI) is to unlock the potential of AI applications in the OM field. Scholars and practitioners interested in providing and sharing the finest and latest advances in the Interplay of AI in the OM field are therefore invited to submit their work.

High-quality original research papers are expected. We would especially welcome innovative contributions based on survey research, in-depth real cases, multicriteria methodologies, and research based on mixed-methods approaches.

The main topics of interest include, but are not limited to:

- In-depth real cases reporting the main types of AI used in OM
- In-depth real cases reporting machine learning applications in OM
- In-depth real cases reporting AI adoption and implementation in the OM field
- In-depth real cases reporting on the use of the Internet of Things in OM
- Surveys exploring the diffusion stages of AI in the OM field
- Surveys exploring the barriers of AI adoption in OM
- AI heuristics for the optimization of the OM service level
- Frameworks to support AI implementation
- AI and big data analytics applied in OM
- AI and blockchain technologies applied in OM
- The application of disruptive technologies in OM
- Multicriteria decision analysis applied in the interplay of AI and OM
- Applications of AI in supply chain management
- Main risks related to AI in OM
- Benefits and improvement of AI in supporting decision-making process in OM
• Critical success factors of AI adoption and implementation and diffusion in OM

Instructions for authors can be found at: http://www.springer.com/business/operations+research/journal/10479

Authors should submit a cover letter and a manuscript by February 15, 2020, via the Journal’s online submission site. Manuscripts submitted after the deadline may not be considered for the special issue and may be transferred, if accepted, to a regular issue.

Please see the Author Instructions on the web site if you have not yet submitted a paper through Springer’s web-based system, Editorial Manager. When making a comment, please select the article’s type "S.I. : Artificial Intelligence in Operations Management" to ensure that it will be reviewed for this Special Issue.

Papers will be subject to a strict review process under the supervision of the Guest Editors, and accepted papers will be published online individually, before print publication.

Guest Editors:

Professor Samuel Fosso Wamba, Toulouse Business School, France, s.fosso-wamba@tbs-education.fr (for information about the SI)

Dr Maciel M. Queiroz, University of São Paulo, Brazil, maciel.queiroz@usp.br

Professor Ashley Braganza, Brunel Business School, UK, ashley.braganza@brunel.ac.uk