

Invited Session on “Artificial Intelligence for Decision Support Systems and applications of Operations Research in Supply Chain” for IFAC MIM 2019

Invited session identification code **54qpe**
FAC MIM 2019, August 28-30, 2019, Berlin, Germany

<https://ifac.papercept.net/>

Session Chairs:

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The decision making in manufacturing and supply chain operations is critical to any firm, but it has not received the much focus from artificial intelligence (AI) firm as compared to the firms in retail, finance and healthcare industry. Recently China has introduced an English news reader with the help of AI. CB Insights has recognized few firms those are working in the area of AI to solve big challenges. These companies are utilizing the AI from drug discovery to robotics. For instance, Bytedance is a firm that has an application which utilizes data mining and recommendation approaches and analyzes the data from social media and reading habits of individuals. On the other hand Flatiron Health is a web-based platform that integrates the entire clinical data and allows the cancer care hospitals and related pharmaceutical companies to gain deep clinical and business intelligence. Therefore, AI acts as a facilitator in decision making in many firms at different nodes of their supply chain operations. AI can help firms in automation, augmentation, and productivity and performance improvement.

Keywords: *Decision Support Systems Artificial Intelligence and Operations Research.*

Session Topics

The session chairs invites the researchers to contribute their ideas, research and investigation in the area of “AI for decision support systems and applications of operations research”. We welcome the grounded theory –linked, empirical and case-based research in this area as long as it deploy and aid to decision support systems for supply chain. Below mentioned topics are indicated one, but contributions are not limited to:

- Artificial Intelligence for decision support systems in supply chains
- Neural networks and deep learning for decision support techniques in supply chain operations
- Multi-objective optimization for decision support tools
- Learning algorithms for outcome assessment for parameter estimation
- Pattern recognition and risk assessment for supply chains by AI
- Cognitive computing for risk assessment in supply chain
- Support vector machines and decision support systems in operations
- Multi-agent systems for inventory, production and resource allocation
- Warehouse and logistics optimization via AI
- Building data robustness for supply chain planning with AI
- Modeling the systems for accurate and quick decision making.
- Probabilistic reasoning and decision support systems
- Other OR applications for decision support systems

Submission

For the submission and author guideline, please refer to www.ifac-control.org. All the manuscripts must be submitted electronically using Symposium Manuscript Management System (CMMS). All papers must

be prepared in a two-column format in accordance with the IFAC manuscript style. Please use the official IFAC instructions and template to prepare your contribution as full-length draft paper and submit it on line by 15th Dec, 2018. Submission details are available on the symposium website. All submissions must be written in English. All papers that conform to submission guidelines will be peer-reviewed by IPC members. The corresponding author submits the paper online (pdf format) as an **invited session paper**. Submission as an invited paper requires the **invited session code 54qpe**. Several international journals are associated with the MIM 2019 for publication of special issues.

3. IMPORTANT DATES

Deadline for Submission	15 th Dec, 2018
Notification of acceptance/rejection	20th Feb, 2019
Deadline for final submission	15th March, 2019