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## **Proposed Special Session on**

Data-Based approaches and Artificial Intelligence in Logistics 4.0

## Organized by:

Samia CHEHBI-GAMOURA, Associate Professor, Humanis (EA 7308), EM Strasbourg, Strasbourg University (samia.gamoura@em-strasbourg.eu) Lyes BENYOUCEF, Full Professor, LIS (UMR 7020), Aix Marseille University (lyes.benyoucef@lis-lab.fr)

## **Call for Papers**

Logistics constitute the arteries of the supply stream. With increasingly connected sensors and information systems, they are becoming an immense generator of the data web for all the supply chain systems. As all the sectors today, logistics are undergoing a profound shaping because of digitalization, where data revolutionizes the way logistics functions are accomplished. Indeed, traditional management systems are no longer efficient and struggle in the changing and volatile environment, where brutal and relentless competitiveness is striking all local and global logistics systems.

Despite this increasing digitalization and availability of rich-Data environments in logistics, Data-based approaches, including Data Mining, Business Intelligence, Big Data Analytics, OLAP, and particularly Artificial Intelligence, are still emerging in the research community. They constitute, in fact, the key levers for the next new generation of logistics, so-called "Logistics 4.0".

Artificial Intelligence (AI) is one of the most promising and coveted Data-based approaches that are powering innovation in logistics systems today. Optimization, scheduling, planning, and predictive algorithms are today in constant growth. They cover several emerging systems such as intelligent container systems, warehousing 4.0, smart automated vehicles, robotized picking systems, intelligent pallets systems, Innovative inventory management, transport 4.0, and so forth. That engenders new opportunities but also generates new unexpected challenges for both academics and industrials.

For that reason, the objective of this special session is to invite academics to present and discuss the way the databased approaches and Artificial Intelligence are affecting the new logistics generation, "Logistics 4.0."

## Subject Coverage

Suitable topics include -but are not limited to the following:

- Artificial Intelligence in logistics
- Machine Learning in logistics
- Data Analytics in logistics (Big Data, Business Intelligence, Data mining, OLAP)
- Smart Containers
- IoT-based and connected logistics
- Data-based approaches in Inbound logistics
- Data-based approaches in Outbound logistics
- Data-based approaches in Line feeding and intra-logistics
- Data-based reversed logistics
- Warehousing 4.0
- Transport 4.0
- Smart picking systems
- Data-based Inventory systems
- Smart routing systems

**Submission:** Authors are invited to submit a full paper limited to 6-10 pages in English. The format of papers must fit with the template format of the conference. Authors' instructions and further information are available on the website of the conference at <a href="https://gol22.sciencesconf.org/resource/page/id/9">https://gol22.sciencesconf.org/resource/page/id/9</a>