

IEEE INTERNATIONAL CONFERENCE ON INDUSTRIAL INFORMATICS INDIN'16

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Special Session on

Big Data and Advanced Data Analytics in the Context of Manufacturing Systems

Big data stands for the intelligent handling and usage of large, heterogeneous and fast changing amounts of data. The challenges related to big data are often characterized by four catchphrases: volume, velocity, variety and veracity. The ultimate goal of big data is the generation of valuable insight from ever growing amounts of data. Many success stories exist in areas such as social media, commerce or finance. The application of Big Data in the context of manufacturing system seems very promising but is still a challenge.

This special session is dedicated to the application of Big Data concepts in technologies to real-world problems in manufacturing systems.

Topics of interest include, but are not limited to:

- Big Data and Advanced Data Analytics Applications in Manufacturing
 - Process Control and Optimization
 - Event-Driven Business Process Management
 - Decision & Operator Support
 - Yield Management, Quality Management
 - Maintenance and Operations
 - Product Design for Manufacturing
- Algorithms and Methods for Manufacturing Analytics
 - Predictive Analytics, Anomaly Detection, Machine Learning, Visual Analytics
 - Data quality and cleaning for manufacturing data
 - Mining heterogeneous data
 - Event detection in complex data
 - Complex Event Processing
 - Unsupervised and supervised learning from large amounts of data
 - Self-optimization of complex industrial processes
- Tools and Technologies
 - Big data technologies (MapReduce, NoSQL, InMemory, Parallel Data Processing) in manufacturing applications
 - Security in big data contexts

- Tools for data mapping, data exploration and data cleaning addressing manufacturing data
- Software Architectures for Big Data and Data Analytics in Manufacturing

Submission Schedule:

Deadline for submission of full paper:	1 January 2016
Notification of acceptance:	10 April 2016
Deadline for final manuscript:	1 May 2016

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INDIN 2016 is 14th International Conference on Industrial Informatics sponsored by the Industrial Electronics Society of the IEEE. The premier conference series presenting the state of the art and future perspectives of industrial information technologies.

The aim of the conference is to bring together researchers and practitioners from industry and academia and provide them with a platform to report on recent developments, deployments, technology trends and research results, as well as initiatives related to industrial informatics and their application

Organizers

Martin Atzmüller (University of Kassel, atzmueLLer@cs.uni-kassel.de.)

Felix Jordan (FIR an der RWTH Aachen)

Benjamin Klöpfer, (ABB Corporate Research Center Germany)

Julian Krumeich, German Research Center for Artificial Intelligence (DFKI GmbH),

Julian.Krumeich@dfki.de

Alexander Maier, Fraunhofer IOSB-INA, alexander.maier@iosb-ina.fraunhofer.de