

DMIN 2016

Call for Papers – Extended Deadline April 12, 2016

Special Session on eMaintenance and Industrial Big Data

Organizer: Diego Galar, Luleå University of Technology, Sweden, diego.galar@ltu.se

Thematic Calls:

Industrial assets are complex mixes of complex systems, built from components which, over time, may fail. The ability to quickly and efficiently determine the cause of failures and propose optimum maintenance decisions, while minimizing the need for human intervention is necessary. Thus, for complex assets, much information needs to be captured and mined to assess the overall condition of the whole system. Therefore the integration of asset information is required to get an accurate health assessment of the whole system, and determine the probability of a shutdown or slowdown. Moreover, the data collected are not only huge but often dispersed across independent systems that are difficult to access, fuse and mine due to disparate nature and granularity. If the data from these independent systems are combined into a common correlated data source, this new set of information could add value to the individual data sources by the means of data mining. The proposed session is expected to cover the state of the art in the development of Big Data technologies in the fields of Knowledge Discovery algorithms from heterogeneous industrial data sources, scalable data structures, real-time communications and visualizations techniques.

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

eMaintenance and maintenance 4.0	Data Quality in AM
Cloud manufacturing and predictive maintenance	Data Uncertainty Management in AM
Industrial taxonomies and ontologies for asset management (AM)	Data Complexity in AM
Data mining and big data in O&M	Data Manipulation in AM
Data Sanitization (removing company sensitive information before releasing it to e.g. cloud, and how to deal with such data)	Data Acquisition in AM
MRO data	Data Analytics in AM
Data Services and servitization of maintenance	Value of Data in AM
LCC and LCA based on data driven approaches	Knowledge Discovery in industrial data
	Maintenance decision support systems
	Industrial expert systems
	Virtual manufacturing as KD and DM techniques
	eMaintenance platforms and hardware solutions

Submission: This special session of [DMIN'16](#) will cover all aspects of eMaintenance and Industrial Big Data. The special session will be held during the DMIN conference, July 25-28, 2016, in Las Vegas, Nevada, USA. All papers should be [submitted using the standard procedures for DMIN papers](#). **For your submission of the draft paper, please select the Track 'eMIBD - Special Session on eMaintenance and industrial big data'**

Date and Venue: The special session will be held at the WorldComp during the Data Mining Conference ([DMIN'16](#)), July 25-28, 2016 in Las Vegas, Nevada, USA.

Deadline for submissions: April 12, 2016 (extended).

Questions: In case of further questions or assistance, please contact the special session organizer via diego.galar@ltu.se and cc to the DMIN conference organizers (special-session-chair@dmin-2016.com and cc to conference-chair@dmin-2016.com)