

TITLE: Methods for Interpretation of Industrial Event Logs (MIEL2018)

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DESCRIPTION: The objective of the workshop is to discuss novel intelligent data analysis methods suitable for the analysis and interpretation of industrial event logs. We aim to include and possibly combine two distinct perspectives. The first uses methods from data mining and computational intelligence. The second uses background domain knowledge for conceptual analysis. We would like to focus on (but not limit to) the applications of the mentioned methods according to those two perspectives to Industry 4.0. In this setting, the source of the event logs would be industrial machinery, but also possibly personnel or activity monitoring devices.

TOPICS OF INTEREST of the workshop include:

- activity recognition in the industrial setting
- anomaly detection on event log data
- conceptual modeling of industrial processes
- conformance checking of industrial process models
- event logs abstraction methods
- intelligent analysis of multi-sensor data
- industrial case studies with real-life complex event logs
- industrial process modeling
- knowledge graphs on event log data
- network analysis on event log data
- ontologies for industrial domains
- ontology-based methods for event-log generation
- supervised and unsupervised methods of log analysis

SUBMISSION: We encourage the submission of full research papers of 8-10 pages, as well as short papers (4 pages) discussing early research proposals, or giving an overview of specific methods and tools applicable for the problems considered in the workshop. Please use EasyChair for submission (<https://easychair.org/conferences/?conf=miel18>). Please follow the Springer LNCS template to format the paper.

PUBLICATION: The workshop proceedings will be published online with CEUR-WS. However, we are planning to invite the authors of the presented papers to submit their extended works to a special issue of a JCR journal.

PROGRAM COMMITTEE (tentative)

Andrea Burattin, Technical University of Denmark, Denmark
Szymon Bobek, AGH University of Science and Technology, Poland
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INTRODUCTORY TALK

Martin Atzmueller: Computational Sensemaking in Industry 4.0: From Analysis to Interpretation

IMPORTANT DATES

31.07.2018 – paper submission

15.08.2018 – notification

15.09.2018 – camera ready version

21-23.11.2018 – tentative workshop date