

TITLE: Methods for Interpretation of Industrial Event Logs (MIEL 2018)

ORGANIZERS/CHAIRS: Grzegorz J. Nalepa, David Camacho, Edyta Brzychczy, Robert Confalonieri, Martin Atzmueller

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 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
- industrial case studies with real-life complex event logs

SUBMISSION & PUBLICATION

The submission guidelines, deadlines and publication topics will adhere to the standard IDEAL 2018 rules for workshops.

PROGRAM COMMITTEE

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INTRODUCTORY TALK

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