

10th IFAC Conference on Manufacturing Modelling, Management and Control
“New challenges for management and control in the Industrie 4.0 era”
June 22-24, 2022, Nantes, France

Session on “Ontology-based development of industrial systems”, code r4377

Typically, in the development of industrial systems, i.e. manufacturing and assembly systems, different disciplines are involved, each of them using its own terminology, methods and tools. The resulting procedure is often fragmented by more or less isolated software systems, leading to the need for manual transfer of data and information, respectively, which is not only expensive but error-prone as well. A promising approach to improve the situation is the usage of common information models acting as “lingua franca” of the used software systems, based on ontological approaches. These common information models would not only allow continuous flows of information between the software systems used, but also the application of novel methods and tools such as generative design, cognitive digital twins, etc.

The aim of this session is to bring together researchers of all related disciplines and subject matters, to discuss problems and ontology-based approaches and solutions in the area of the development of industrial systems, like requirements engineering and management, industrial system architecture, assembly planning, manufacturing engineering, as well as simulation and optimization.

Session organizers:

Rebeca Arista Rangel, Airbus, France, rebeca.arista@airbus.com
Joachim Lentjes, Fraunhofer IAO, Germany, joachim.lentjes@iao.fraunhofer.de
Prof. Dimitris Kiritsis, EPFL, Switzerland, dimitris.kiritsis@epfl.ch

We look forward to your submission, mentioning the session code r4377.

More information about IFAC MIM 2022: <https://www.mim2022.com>