

Ontologies for Robots

Workshop @ European Robotics Forum

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Motivation

- There is *intensive research and development* activity in providing and making use of semantically meaningful information in robotic systems.
- In particular, besides the widespread use of semantic technology by academia, there is a growing interest in it, in the context of *possible or actual industrial applications*.
- We intend to summarize the *current state* of (European) robotic ontology ecosystem, find out commonalities, agree upon ways of result exchange and discuss *possible business models* for this kind of "product" or "service".

Agenda

- Academic research 1 (Michael Beetz)
- Industry presentations
 - ABB (Mikael Hedelind)
 - Kuka (Jürgen Bock)
- Academic research 2
- Standardization (IEEE ORA, Tamas Haidegger)
- Discussion
- Conclusions, plans for the future

Research presentations

- Michael Beetz, University of Bremen
- Alexander Perzylo, FORTISS
- Jacek Malec, Lund University
- Nadia Ahmed, FZI
- Herman Bruyninckx, KUL

Organizers

Saadia Dhouib, CEA, France, saadia.dhouib@cea.fr, Tamas Haidegger, Óbuda University, Hungary, haidegger@ieee.org, Jacek Malec, Lund University, Sweden, jacek.malec@cs.lth.se, Alexander Perzylo, FORTISS, Germany, perzylo@fortiss.org, Moritz Tenorth, University of Bremen, Germany, <u>moritz@tenorth.de</u>

Discussion topics

- 1. Use cases (EU-financed research projects, existing or planned industrial applications)
- 2. Expected business models
- Forecast of the development of semantic technology in industrial robotics (planned or demanded) for the coming 5 years



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