2015 Ontology Summit & Symposium

Internet of Things: Toward Smart Networked Systems & Societies

Track A: Ontology Integration in IoT

Track Champions:

Dr. Leo Obrst (MITRE)

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Track Goal

- Billions of things will be connected to the Internet
- These things span a spectrum of cognitive abilities
  - From simple sensors to humans
- Ontologies will play a significant role in integrating these things at different abstraction levels
- *Goal of Track:* To discuss the various approaches being taken to address the integration and interoperability issues

Issues to be addressed

- Present case studies of IoT
- Discuss current approaches in integration and interoperability
- Discuss gaps in current approaches
- Discuss issues of vertical integration and interoperability across layers of the IoT, including granularity
- Propose methods for achieving integration and interoperability through ontologies
- Propose a unified framework for integration and interoperability for multimodal (audio, text, video, etc.) interfaces

Potential Speakers

- February 5th
  - Prof. Steven Ray, CMU-Silicon Valley
  - Prof. Ramesh Jain, University of California-Irvine
  - Prof. Payam Barnaghi, University of Surrey, UK, Dr. Wei Wang, University of Surrey, UK
- March 12th
  - Dr. Jack Hodges, WOT, Siemens Berkeley Laboratory
  - Prof. Eswaran Subrahmanian, CMU
  - Prof. Amit Sheth, Knoesis, Wright State University
  - Dr. Sara Hatchem, INRIA, France
  - Amelie Gyrard, Eurecom, France

Outcome

- Action items for future research

- Develop scenarios for pilot implementations

- Recommendations for Communiqué