2015 Ontology Summit & Symposium
Internet of Things: Toward Smart Networked Systems & Societies

Track A: Ontology Integration in IoT
Track Champions:
Dr. Leo Obrst (MITRE)
Dr. Ram D. Sriram (NIST)
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