Ontology Summit 2015
Track C: Decision Making in Different Domains

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Motivation

From the Summit theme:

- Identify a methodology for development of terminologies for multimodal data (or ontologies), developing appropriate ontologies, developing testing methods for these ontologies, demonstrating interoperability for selected domains (e.g., healthcare, situational awareness), and using these ontologies in decision making.

Domains

- Smart Grid
- building automation
- manufacturing
- smart cities
- supply chain management (inventory control, transportation/logistics)
- healthcare
- environmental monitoring
- ubiquitous/pervasive computing

Examples of Reasoning Applications

- analyzing data collected by sensors (sensor fusion)
- acting independently in different environments and circumstances (autonomous control)
- interpreting events and reacting according to user goals and policies (event recognition)
- automating process control
- optimization
- embedded intelligence

Mission

- Identify key problems in IoT which require (or would benefit from) automated reasoning (motivating scenarios for ontologies in IoT)
  - ▶ Decision Support
  - ▶ Integration and interoperability of devices (interactions among smart objects)
- Address the challenges for these applications
  - ▶ role of ontology languages (expressiveness/tractability)
  - ▶ are existing ontologies adequate for supporting these applications?
  - ▶ scalability of approaches to semantic integration and automated reasoning

Session Plan

Track C sessions are planned for

- February 12
- March 19

In addition to speaker presentations, we also want to dedicate time to panel discussions and brainstorming on reasoning requirements for ontology-based IoT approaches.