ONTOLOGY SUMMIT 2014

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OVERCOMING ONTOLOGY ENGINEERING BOTTLENECKS

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STRATEGIES AND BUILDING BLOCKS

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Track Mission

To identify bottlenecks that hinder the large-scale development and (re)usage of ontologies and identify ways to overcome them.

Bottlenecks include

- . . .
- Modeling axioms or knowledge representation language fragments that cause difficulties in terms of an increase in reasoning complexity or reducing the reuseability of ontologies
- . . .

Potential Solutions include

- . . .
- The development of a set of reusable patterns that can ease ontology development and alignment
- The identification of purpose-driven modeling granularities that provide sufficient semantics without over-engineering
- . . .

For details visit: bit.ly/1jea2ZS

STRATEGIES AND BUILDING BLOCKS SESSION

Questions that we would like to address during today's session

- How to arrive at reusable patterns? How many patterns are there? Are there types of patterns? Are all patterns domain-independent? Can we mine patterns from data?

- Who will develop and maintain these patterns? Are there measures or at least experience reports on the robustness and usefulness of patterns? Are there success stories of large-scale pattern usage?

- How to abstract from individual ontology designs? Do we need higher-level ontology modeling languages on top of knowledge representation languages? How to get community buy-in?

- How important is the selection of specific language constructs for the scalability and reuse of patterns?

SPEAKERS

- **Werner Kuhn**
  University of California, Santa Barbara
  Abstracting behavior in ontology engineering

- **Aldo Gangemi**
  University Paris 13
  Knowledge patterns as one means to overcome ontology design bottlenecks

- **Karl Hammar**
  Jönköping University
  Reasoning performance indicators for ontology design patterns