

Ontolog Phase 2: Board of Trustees Community Session

Background & Vision

June 26, 2014

Dr. Leo Obrst
Information Semantics
Cognitive Science & Artificial Intelligence
Information Technology Technical Center
Center for Connected Government
MITRE
Lobrst@mitre.org

My Background

- U Texas Austin, PhD, Theoretical Linguistics: Semantics
- First Energy, SoftCraft, Texas Instruments, UT AI Lab, MCC, Intelligent Business Systems, Logos, Boeing, MITRE, VerticalNet, MITRE
- Computational Linguist & AI/Computer Scientist (1984 - present), Ontologist (since 1995): many programming languages, but mostly Common Lisp, Prolog
- Director, Ontological Engineering, VerticalNet, 1999-2001
- Co-Convenor of Ontolog, 2002 (with Peter Yim, Kurt Conrad)
- W3C Web Ontology Working Group (OWL), 2002-2004
- Created Information Semantics Group, MITRE, 2002
- International Association for Ontology and Its Applications (IAOA) Executive Council, 2009 – present
- Interests: Knowledge Representation, Ontology Engineering, Logic Programming, Knowledge Compilation/Optimization, Event Reasoning, Decision Support, Governmental, and Intelligence Applications of AI

Current Research & Efforts

- Event-based ontology representation for NLP and predictive analytics
- Ontology representation and rule reasoning for financial compliance, analytics; soon: electronic healthcare records
- Knowledge compilation/optimization techniques for subsumption and rule reasoning
- Prolog and Answer Set Programming for rule reasoning
- Transforming and linking vocabularies and ontologies

Vision for Ontolog

- Provide continuity, stability, and potential transformation to the Ontolog Community of Practice
- New products, new ways of doing things, new people
- Outreach beyond USA and Europe to Asia, Africa, Australia
 - How do we do this and, e.g., have real-time participation in virtual sessions, given multiple time-zones?
- Multiple “Secretariats” and Groups focused on specific tasks, aspects, events, products?
- Beyond current Ontology Summit products: books, etc.