

## Semantics as the Basis of Truly Cognitive Computing

At the 2014 AAAI, Pat Langley, one of the founders of machine learning and, recently, of its detractors, publicly lamented the current abandonment of the “big issues” in AI. Indeed, from emulating human intelligence in the process of learning more about it, AI is often confused with non-intelligent emulation of human intelligent activities. Both in the States and Europe, cognitive computing has emerged as attempts to equip the computer with some knowledge of the domain in which it operates. Cognitive robotics is one of the latest application of this approach. What I am planning to discuss in the plenary is that our Ontological Semantic Technology offers a framework for capturing, structuring, and computerizing our entire knowledge of the world and anchoring natural language semantics in that knowledge. The grain size of the representation may vary with the applications, and in some cases, the domain represented can be small and coarse in grain size, but the approach has proven the feasibility, both intellectual and computational, as well as economical, to stop avoiding the complete representation of the human knowledge of the world. No longer a grand vision or a fantasy, the project is implementable at real time and affordable, often one-time cost. Fear of semantics should be no more; dumb computers should be a thing of the past, and the time of brilliant meaning-avoiding hokus-pokuses has ended.