

## **CFP: Sensor Ontologies**

**Special issue of the journal *Applied Ontology***

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Questions about *what is happening*, *what has happened*, and *what will happen* are important for individuals, organizations, and society. Sensors everywhere can help to answer these questions, but sensors themselves only record *what is* (for instance what is the value for water flow, or freeway traffic load, or calorie burnt) at any given time. They do not record *what is happening* – that is they do not tell us what events are or have been or will be taking place. Interpreting sensor data in terms of event descriptions that make sense for different types of users has accordingly become a key research challenge.

The central topic of this special issue is: how can ontologies support analysis of sensor data. We are interested in all ontology-related aspects of this topic, from specific use cases and implementations to surveys of state-of-the-art approaches. Subtopics include but are not limited to the role of ontologies in

- inferencing event descriptions from sensor data using either natural language (narrative descriptions) or formal language or a combination of both;
- event localization and event identification;
- using sensor data to enhance and validate event descriptions (including events in the past as well as in the future);
- the role of sensor data analysis in areas such as environmental modeling and forecasting, medical diagnosis, criminal and military intelligence, monitoring of large-scale social actions;
- fusion of sensor data with soft data deriving from human observations and social media.

Submissions are invited from all those interested in the topic of Sensor Ontologies. All submissions will be refereed.

**Deadline for submissions: September 30th, 2016**