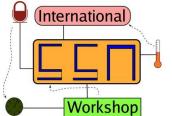# 3rd International Workshop on Semantic Sensor Networks 2010 (SSN10)
First Call for Papers

http://research.ict.csiro.au/conferences/ssn/ssn10

A workshop of the 9th International Semantic Web Conference ISWC 2010

7—11 November 2010, Shanghai, China

Semantic technologies are often proposed as important components of complex, cross-jurisdictional, heterogeneous, dynamic information systems. The needs and opportunities arising from the rapidly growing capabilities of networked sensing devices are a challenging case.

It is estimated that today there are 4 billion mobile devices that can act as sensors, including active and passive RFID tags. This is complemented by an even larger number of fixed sensors recording observations of a wide variety of modalities. Geographically distributed sensor nodes are capable of forming ad hoc networking topologies, with nodes expected to be dynamically inserted and removed from a network. The sensors are increasingly being connected with Web infrastructure, and the Sensor Web Enablement (SWE) standard developed by the Open GIS Consortium is being widely adopted in industry, government and academia alike. While such frameworks provide some interoperability, semantics are increasingly seen as a key enabler for integration of sensor data and broader Web information systems. Analytical and reasoning capabilities afforded by Semantic Web standards and technologies are considered important for developing advanced applications that go from capturing observations to recognition of events and ultimately developing comprehensive situational awareness. Defence, transportation, global enterprise, and natural resource management industries are leading the rapid emergence of applications in commercial, civic, and scientific operations that involve sensors, web, services and semantics.

The goal of the Semantic Sensor Networks workshop is to develop an understanding of the ways semantic web technologies can contribute to the growth, application and deployment of large-scale sensor networks on the one hand, and the ways that sensor networks can contribute to the emerging semantic web, on the other. The workshop provides an inter-disciplinary forum to explore and promote these concepts.

The workshop is now seeking paper submissions. Topics include, but are not limited to:

- Semantic support for Sensor Web Enablement
- Semantic integration in heterogeneous sensor networks
- Sensors and observations for symbol grounding
- Semantic web services architectures for sensor networks
- Semantic algorithms for data fusion and situation awareness
- Rule-based sensor systems
- Semantic policy management in shared networks
- Semantic discovery of sensors, sensor data and services
- Semantic approaches to status monitoring and configuration of sensor systems
- Semantic reasoning for network topology management
- Semantic sensor context management and provenance

- Spatio-temporal reasoning in sensor networks
- Reasoning with incomplete or uncertain information in sensor networks
- Semantic middleware for active and passive sensor networks
- Experience in sensor network applications of semantic technologies
- Ontologies for sensor and RFID networks
- Semantic feedback and control
- Emergent semantics and ambient intelligence in sensor systems
- Scalability, security, trust and privacy in semantic sensor networks
- Semantic web in sensor data mashups
- Citizen sensors, participatory sensing and social sensing

Important Dates

Paper Submission Deadline: 27th August, 2010
Notification of Acceptance: 17th September, 2010
Final Manuscript Deadline: 15th October, 2010
Workshop: 7 or 8 November, 2010

Paper submission

Both full papers and short papers are sought. Full papers should be of 12-16 pages length. Short papers should be 2-6 pages and should clearly include "Short Paper", "Extended Abstract" or "Position Paper" in the paper title. Papers will be reviewed by at least two program committee members for their technical merit, originality, significance, and relevance to the workshop. The papers must be in good English in PDF format and in the Springer LNCS style. Accepted papers will be published in a proceedings volume of CEUR-WS http://CEUR-WS.org and the best papers may be invited for extension and inclusion in a Springer book. Full instructions for submission will be made available at the workshop web site http://research.ict.csiro.au/conferences/ssn/ssn10.

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