SPEAKER:

Dr. Jeff Z. Pan

Department of Computing Science

The University of Aberdeen

DATE:

Wednesday, the 6th of April, 2011

TIME:

15:15 - 16:15

LOCATION:

Heriot-Watt University, Earl Mountbatten Building; room 3.02

TITLE:

Semantic Web and Reasoning: The Story so Far

ABSTRACT:

In order to implement the Semantic Web vision, the World Wide Web Consortium (W3C) has a few standards that are relaed to reasoning, including RDF, OWL and SPARQL. Indeed, tractable reasoning over ontologies is one of the most useful and important services to support Semantic Web applications. The talk will begin with an introduction of the above standards, with examples to illustrate why they are needed for linked data and semantic web applications. As OWL plays a key role in Semantic Web reasoning, I will then introduce the new OWL2 standard and how to perform tractable reasoning in OWL2, by exploiting its tractable sub-languages such as OWL2-EL and OWL2-QL, as well as faithful approximate reasoning

built on top of these sub-languages. If time allows, I could give a

short demostration of our TrOWL (Tractable reasoning for OWL2,

<http://trowl.eu/>) reasoning infrastructure. I will conclude the talk with discussions on some of our relevant recent work and future steps.

Jeff Z. Pan received his Ph.D from University of Manchester in 2004 and joined the faculty in the Department of Computing Science at University of Aberdeen in 2005. He is now the Deputy Director of Research of the department. He has over 100 referred publications and serves on the Editorial Board of the Journal of Web Semantics (JoWS, impact factor 3.4), the International Journal on Semantic Web and Information Systems (IJSWIS), and as program chair of RR2007 (The First International Conference on Web Reasoning and Rule Systems), JIST 2011 (The First Joint International Semantic Technology Conference), ESWC2010 Ontology and Reasoning Track, ISWC2010 Doctoral Consortium and ESWC2011 Ph.D.

Symposium. He is a key contributor to the W3C OWL2 standard. He leads the work of the TrOWL Tractable OWL2 reasoning infrastructure (<http://trowl.eu/>). He is widely recognised for his work on scalable and efficient ontology reasoning; he gave/will give tutorials on this topic also in e.g. AAAI2010, ESWC2010, the Reasoning Web Summer School 2010,

ESWC2011 and SemTech 2011.