2010/2011 Seminar Series

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Expressive Querying of Semantic Databases with Incremental Query Rewriting

By:

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Semantic databases, such as RDF triplestores, are becoming a popular alternative to Relational Databases. However, one of the main advantages of semantic databases -- the possibility of direct application of reasoning to the data -- is currently underutilised due to the lack of scalable methods for querying modulo expressive knowledge bases, such as OWL ontologies and RIF or RuleML rule bases. Incremental Query Rewriting enables such querying and, since many triplestores are implemented on top of RDB, can be directly applied to them. Moreover, it can be used to rewrite SPARQL queries to other SPARQL queries directly executable on semantic DBvia their SPARQL endpoint. In this talk I will briefly introduce the method, discuss its applicability for semantic DB, and demonstrate some prototype software.

Alexandre Riazanov is a Senior Research Scientist at the Computer Science and Applied Statistics Department, UNB Saint John. He holds a PhD in Computer Science from the University of Manchester. Alexandre is known for his previous work in efficient implementation techniques for automated reasoning. His current interests are mainly in semantic technologies, especially in application to databases and Web services. This talk is based on joint work with Dr. Marcelo Aragão, University of Manchester and Central Bank of Brazil.

Friday, June 3rd @ 1:30pm
Exceptional Location: NRC Training Rooms 2-3
46 Dineen Drive, Fredericton