



INFORMATICS COLLOQUIUM

Speaker:**Dr. Juan F. Sequeda, Director of Capsenta Labs (Austin, USA)**

Integrating Relational Databases with the Semantic Web: Past, Present and Future

Abstract:

It has been clear from the beginning that the success of the Semantic Web hinges on integrating the vast amount of data stored in Relational Databases. In 2007, the W3C organized a workshop on RDF Access to Relational Databases. In 2012, two standards were ratified that map relational data to RDF: Direct Mapping and R2RML.

In this lecture, I will reflect on the last 10 years of research results and systems to integrate Relational Databases with the Semantic Web (past). I will provide an answer to the following question: how and to what extent can Relational Databases be integrated with the Semantic Web? I will review how these standards and systems are being used in practice for Data Integration and Ontology Based Data Access (present) and discuss open challenges (future).

Bio:

Juan F. Sequeda is the co-founder of Capsenta, a spin-off from his research, and the Senior Director of Capsenta Labs. He holds a PhD in Computer Science from the University of Texas at Austin. His research interests are on the intersection of Logic and Data and in particular between the Semantic Web and Relational Databases for data integration, ontology based data access and semantic/graph data management. Juan is the recipient of the NSF Graduate Research Fellowship, received 2nd Place in the 2013 Semantic Web Challenge for his work on ConstituteProject.org, Best Student Research Paper at the 2014 International Semantic Web Conference and the 2015 Best Transfer and Innovation Project awarded by Institute for Applied Informatics. Juan is the PC chair of the ISWC 2017 In-Use track, is on the Editorial Board of the Journal of Web Semantics, member of multiple program committees (ISWC, ESWC, WWW, AAAI, IJCAI), organizer of the AMW Summer School and co-creator of the Consuming Linked Data Workshop series. Juan is a member of the Graph Query Languages task force of the Linked Data Benchmark Council (LDBC) and has also been an invited expert member and standards editor at the World Wide Web Consortium (W3C).

Date and time: Monday July 3rd, 2017, 2.15 pm
Location: Pérolles 21, room A230, Bd de Pérolles 90, Fribourg
Contact person: Prof. Philippe Cudré-Mauroux

The colloquium is free and open to the public.