IEEE 7th International Conference on Semantic Computing (ICSC2013)

Tutorial and Workshop on Graph Analytics (TWGA 2013)

Discovering interesting patterns in huge complex graphs in a Semantic database can be a daunting task. Some data sets contain thousands of classes and relationships, making it hard to even formulate the analytics and queries you want to perform. We created a visual analytics and discovery tool that lets you manually explore graphs, find the shortest paths between nodes of interest, etc. Once you see interesting patterns on your screen you can turn those patterns automatically into SPARQL or Prolog queries. In my talk I will use an example from the life sciences domain and another example using financial transactions. The latter example not only uses pattern discovery but also geospatial and temporal reasoning.

Main topics

- What is RDF
- Working with an RDF graph database
- Query your data with SPARQL
- Define rules with Prolog
- Reasoning with RDFS and OWL
- Working with geospatial and temporal features
- Social Network Analytics
- Exploring semantic data visually
- Creating SPARQL queries in a visual query editor.

Tutorial Speakers

Jans Aasman, Franz Inc. Jeffrey Abbott, DEL REY Systems

Organizing Committee

Jans Aasman, Franz Inc.

Jeffrey Abbott, DEL REY Systems (Point of Contact. <u>jmamedia@mac.com</u>)

Phil Sheu, University of California-Irvine