<Computer_Systems_Technology_Colloquium/>

KNARIG ARABSHIAN

- April 7, 2016
- 300 Jay St. Brooklyn, NY • Namm 928
- Noon - 1:00pm

Ontology-based Classification and Faceted Search Interface for APIs

This work introduces faceted service discovery. It uses the Programmable Web directory as its corpus of APIs and enhances the search to enable faceted search, given an OWL ontology. The ontology describes semantic features of the APIs. We have designed the API classification ontology using LexOnt, a software we have built for semi-automatic ontology creation tool. LexOnt is geared toward non-experts within a service domain who want to create a high-level ontology that describes the domain. Using well- known NLP algorithms, LexOnt generates a list of top terms and phrases from the Programmable Web corpus to enable users to find high-level features that distinguish one Programmable Web service category from another. To also aid non-experts, LexOnt relies on outside sources such as Wikipedia and Wordnet to help the user identify the important terms within a service category. Using the ontology created from LexOnt, we have created APIBrowse, a faceted search interface for APIs. The ontology, in combination with the use of the Apache Solr search platform, is used to generate a faceted search interface for APIs based on their distinguishing features. With this ontology, an API is classified and displayed underneath multiple categories and displayed within the API Browse interface. APIBrowse gives programmers the ability to search for APIs based on their semantic features and keywords and presents them with a filtered and more accurate set of search results.

Knarig Arabshian is an Assistant Professor in the Computer Science Department at Hofstra University, since Fall 2014. Prior to that she was a Member of Technical Staff at Bell Labs in Murray Hill, NJ. She received her Ph.D. in Computer Science from Columbia University in 2008.

Professor Arabshian's interests lie in the field of semantic web, service discovery and composition, context-aware computing and distributed systems. The goal of her research is to drive forward the idea of a personalized web. Her work explores ways of describing data meaningfully and designing frameworks and systems for efficient data discovery. During her tenure at Bell Labs, she worked on different aspects of ontology creation, distribution and querying.

Light refreshments will be served.

For more information visit our website:
openlab.citytech.cuny.edu/cstcolloquium

NEW YORK CITY COLLEGE OF TECHNOLOGY

WHERE CAN TECHNOLOGY TAKE YOU?

CUNY The City University of New York