

Dortmund, 24. August 2009

EINLADUNG

Im Rahmen des Kolloquiums der Fakultät für Informatik wird

Dr. Maria Vargas-Vera
Computing Department, Open University UK

einen Vortrag halten mit dem Titel

Ontology Mapping in a Multi-Agent Question Answering System

ORT: HG I, HS 3

ZEIT: Dienstag, 22. September 2009, 16:15 Uhr

ZUSAMMENFASSUNG:

Abstract:

Ontologies can play a very important role in information systems. They can support various information system processes, particularly information acquisition and integration. In this talk I will present DSSim (short for Dempster-Shafer Similarity) is a Multi-Agent Ontology Mapping System for AQUA (Question Answering System) that uses several agents performing mappings and then the evidence found by each agent is combined using the Dempster-Shafer Theory. This solution is generic as it does not need to learn mappings in advance unlike other approaches which use Machine Learning techniques. The ontology mapping algorithm gets evidence from different sources like WordNet and background knowledge (specific to the domain ontology). In addition, recently we have added a Fuzzy Voting Model to the system in order to resolve the problem of "contradictory evidences" which are ignored when using the Dempster-Shafer rule of combination. The Dempster-Shafer rule strongly emphasizes the agreement between multiple sources and ignores all the conflicting evidence through a normalization factor.

Biographical notes:

Dr. Vargas-Vera received her PhD from the Artificial Intelligence Department at Edinburgh University (1995). Her current research focuses on Automatic Construction of Ontologies from Text, Ontology Mapping using Agents and E-Learning

**ZU DIESEN VORTRÄGEN LADEN HERZLICH EIN
DIE DOZENTEN DER FAKULTÄT FÜR INFORMATIK**

Applications using Semantic Web Technologies. Dr. Vargas-Vera has published research papers in international journals, conferences. She is a member of program committees of international conferences and workshops on her research field. Finally, Dr. Vargas-Vera is an Associated Editor of the Journal of Emerging Technologies in Web Intelligence (JETWI); the "Revista Iberoamericana Computacion y Sistemas" and also she is Associated Editor of the "International Journal on Knowledge and Learning" (IJKL).

ZU DIESEN VORTRÄGEN LADEN HERZLICH EIN
DIE DOZENTEN DER FAKULTÄT FÜR INFORMATIK