Presents

Grace Series Talk

Grace Series Talks are Women Empowerment Talks for Grad and Undergrad Students in Computer Science and Software Engineering

Monday, April 4, 2016 at
7pm – 8pm
Location: Osborne Conference
Room - ECSS 3.503

"*What I learned about Research in the Digital Age*"

By: **Dr. Sanda M. Harabagiu**

A large percentage of electronic documents are generated by using natural language. Human communication is at the core of knowledge exchange. In this talk I shall describe problems that have fascinated me and informed my research in the past two decades, starting with natural language processing and ending with medical informatics. I shall first address the question of what I have learned from semantics of Question-Answering systems and then describe the many forms of knowledge that can be discerned from clinical documents. Electronic medical records (EMR) contain a wealth of information only expressed in natural language. Automated methods for extracting information from these records must be able to recognize medical concepts in text, addressing lexical, syntactic, and semantic ambiguity. Furthermore, to perform any form of automated reasoning on this information, the context of these concepts must be understood. One contextual property critical to reasoning is the doctor's belief status (or assertion) of the patient's medical problem. A doctor could qualify a particular problem as being present, absent, possible, hypothetical, conditional on another factor, or associated with someone else. In addition, to enable medical informatics, we need to identify relations that span concepts mentioned in the EMRs. The ability to identify relations between medical problems, treatments and tests typically result in improved quality of patient care. In addition, I shall present the role of Big Data in Medical Informatics and how it will make the most important contribution to knowledge acquisition in Medicine.

Sanda M. Harabagiu is a Professor of Computer Science and the Erik Jonsson School Research Initiation Chair at the University of Texas at Dallas. She is also the Director of the Human Language Technology Research Institute at University of Texas at Dallas.

*Free Food   *Prizes

CONTACTS are Computer Science Faculty:

Dr. Pushpa Kumar, Dr. Janell Straach,

and Dr. Linda Morales