Computer Science
Seminar

Information Discovery on Vertical Domains

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Abstract: As the amount of available data increases, the problem of information discovery, often referred to as finding the needle in the haystack problem, becomes more pressing. The most successful search applications today are the general purpose Web search engines and the well-structured database querying (e.g., SQL). Directly applying these two search models to specific domains is ineffective since they ignore the domain semantics -meaning of object associations- and the needs of the domain users -a biologist wants to see different results from a physician for the same query on PubMed. We present challenges and techniques to achieve effective information discovery on vertical domains by modeling the domain semantics and its users, and exploiting the knowledge of domain experts. Our focal domains are products marketplace, biological data, clinical data, bibliographic data, blogs and patents. This project is being funded by NSF.

Bio:
Vagelis Hristidis is an Associate Professor at the School of Computing and Information Sciences at Florida International University, in Miami. He received his PhD in Computer Science from the University of California, San Diego, in 2004. He has received funding from the National Science Foundation, the Department of Homeland Security, Google, IBM and the Kauffman Entrepreneurship Center, including the NSF CAREER Award. He has also received the FIU SCIS Excellence in Research Award twice, the FIU University Faculty Award, and the FIU University Service Award. His main research addresses the problem of bridging the gap between databases and information retrieval, with particular interest in the interdisciplinary directions of Healthcare and Disaster Management. His work has received more than 2,100 citations according to Google Scholar. He also recently edited and co-authored a book on Information Discovery on Electronic Health Records. For more information, please visit http://www.cis.fiu.edu/ vagelis/.

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