

**Title:**

Information Discovery on Vertical Domains

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 – e.g., meaning of object associations – and the needs of the domain users – e.g., 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, and bibliographic data.

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Bio:

Vagelis Hristidis is an assistant professor at the School of Computing and Information Sciences at the Florida International University in Miami. He received his B.S. in Electrical and Computer Engineering from the National Technical University of Athens and his M.S. and Ph.D. in Computer Science from the University of California, San Diego in 2004. His main research work addresses the problem of bridging the gap between Databases and Information Retrieval. His work has received more than 1000 citations according to Google Scholar, and has been funded by the National Science Foundation and the Department of Homeland Security. For more information, please visit <http://www.cs.fiu.edu/~vagelis/>.