ΔΙΑΛΕΞΗ

"Object Summaries For Keyword Search"

Georgios Fakas

Associate Professor (Docent),
Department of Information Technology
Uppsala University

Περίληψη – Abstract

The abundance and ubiquity of graphs (e.g., online social networks such as Google+ and Facebook; bibliographic graphs such as DBLP) necessitates the effective and efficient search over them. Given a set of keywords that can identify a data subject (DS), a recently proposed keyword search paradigm produces a set of object summaries (OSs) as results. An OS is a tree structure rooted at the DS node (i.e., a node containing the keywords) with surrounding nodes that summarize all data held on the graph about the DS.

OS snippets, denoted as size-l OSs, have also been investigated. A size-l OS is a partial OS containing l nodes such that the summation of their importance scores results in the maximum possible total score. However, the set of nodes that maximize the total importance score may result in an uninformative size-l OSs, as very important nodes may be repeated in it, dominating other representative information. In view of this limitation, we investigate the effective and efficient generation of two novel types of OS snippets, i.e., diverse and proportional size-l OSs. Namely, besides the importance of each node, we also consider its pairwise relevance to the other nodes in the OS and the snippet. We conduct an extensive evaluation on two real graphs (DBLP and Google+).

Georgios Fakas has been an Associate Professor (Docent) at the Department of Information Technology since March 2017. Prior to that, he also worked as a Research Fellow at the Hong Kong University of Science and Technology (with Prof. Dimitris Papadias), Hong Kong University (with Prof. Nikos Mamoulis), EPFL (Lausanne, Switzerland), UMIST (Manchester, UK), University of Cyprus (Cyprus). He also worked as a Senior Lecturer at Manchester Metropolitan University (UK). He has published papers in influential conferences and journals of data management, including SIGMOD, PVLDB, VLDB Journal, IEEE TKDE, DKE, etc. He obtained his Ph.D. in 1998, his M.Phil. in 1996 and his B.Sc. in Computation in 1995; all from the Department of Computation, UMIST, Manchester, UK. His research interests include (1) big data; (2) keyword search and ranking on (semi) structure data and (attributed) graphs; (3) web search; (4) online (geo) social networks.

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