

Crowd-Sourcing Literature Review in SUNFLOWER

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1. ABSTRACT OF THE INVITED TALK

Reviewing literature is painful albeit intellectually rewarding. I will describe SUNFLOWER, a system we developed in collaboration with Bloomsbury, a publisher of scientific material, member of Qatar Foundation. SUNFLOWER combines the power of search and collaborative editing to review and summarize a large number of articles around a topic. It works in three steps. The first step performs a composite retrieval of related articles where k bundles of complementary articles are built using article metadata such as authors and citations. The second step associates a summary to each bundle by extracting key phrases from their constituent articles. The last step involves humans that collaboratively edit extracted summaries into a coherent literature review on the topic. We report our experiments on scientific articles from qscience.com

2. SPEAKER BIOGRAPHY

Sihem Amer-Yahia is Principal Research Scientist at Qatar Computing Research Center (QCRI) where she leads the Social Computing group. She is also DR1 CNRS at LIG in France. Her interests are at the intersection of large-scale data management and analytics. She works on developing scalable algorithms for organizing, mining and managing large volumes of social breadcrumbs left by millions of users online. One of the key projects is a collaboration with Al Jazeera and MIT to help news consumers and journalists organize and understand user-generated input in the form of comments on articles, tweets, Facebook likes and shares. Sihem has over 80 publications in major Web data management and social conferences. Prior to her current position, she worked as Senior Scientist at Yahoo! Research for 5 years on revisiting relevance models and top- k processing algorithms on datasets from Delicious, Yahoo! Personals and Flickr. Before that, she spent 7 years at AT&T Labs in NJ, working on XML query optimization and XML full-text search. Sihem is editor of the W3C XML full-text standard. She is a member of the VLDB Endowment and the ACM SIGMOD executive committee. She serves on the editorial boards of ACM TODS, the VLDB Journal and the Information Systems Journal. Sihem received her Ph.D. in CS from Univ. Paris-Orsay and INRIA in 1999, and her Diplôme d'Ingenieur from INI, Algeria in 1994.