香港浸會大學理學院
HKBU Faculty of Science

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DEPARTMENT OF COMPUTER SCIENCE

PhD Degree Oral Presentation

PhD Candidate:	Mr Lei CHEN
Supervisor:	Prof Jianliang XU
External Examiner:	Prof Gao CONG (EEx from Singapore)
	Prof Man Lung YIU (EEx from Hong Kong Polytechnic University)
Time:	7 Dec 2016 (Wednesday)
	2:30 pm - 4:30 pm (35 mins presentation and 15 mins Q & A)
Venue:	RRS 732, Sir Run Run Shaw Bldg, HSH Campus

"Answering Why-Not Questions on Spatial Keyword Top-k Queries"

Abstract

With the continued proliferation of location-based services, a growing number of web-accessible data objects are geo-tagged and have text descriptions. Spatial keyword top-k queries retrieve k such objects with the best score according to a ranking function that takes into account a query location and query keywords. However, it is in some cases difficult for users to specify appropriate query parameters. After a user issues an initial query and gets back the result, the user may find that some expected objects are missing and may wonder why. Answering the resulting why-not questions can aid users in retrieving better results and thus improve the overall utility of the query functionality. While spatial keyword querying has been studied intensively, no proposals exist for how to offer users explanations of why such expected objects are missing from results. In this dissertation, we take the first step to study the why-not questions on spatial keyword top-k queries. We provide techniques that allow different revisions of spatial keyword queries such that their results include one or more desired, but missing objects. Detailed problem analysis and extensive experimental studies consistently demonstrate the effectiveness and robustness of our proposed techniques in a broad range of settings.

*** ALL INTERESTED ARE WELCOME ***