**1st Talk:**

Oriented Online Route Recommendation for Spatial Crowdsourcing Task Workers

Dr. Man Lung YIU
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**2nd Talk:**

Query Optimization over Data Market

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**1st Talk**

**Abstract:**

Emerging spatial crowdsourcing platforms enable the workers (i.e., crowd) to complete spatial crowdsourcing tasks (like taking photos, conducting citizen journalism) that are associated with rewards and tagged with both time and location features. In this talk, we study the problem of online recommending an optimal route for a crowdsourcing worker, such that he can (i) reach his destination on time and (ii) receive the maximum reward from tasks along the route. First, we show that no optimal online algorithm exists in this problem. Then, we propose several heuristics, and powerful pruning rules to speed up our methods. Experimental results on real datasets show that our proposed heuristics are very efficient, and return routes that contain 82–91% of the optimal reward.

**About the Speaker:**

He received the bachelor’s degree in computer engineering and the PhD degree in computer science from the University of Hong Kong in 2002 and 2006, respectively. He worked at Aalborg University for three years starting in the Fall of 2006. He is now an associate professor in the Department of Computing, Hong Kong Polytechnic University. His research focuses on the management of complex data, in particular query processing topics on spatiotemporal data and multidimensional data.

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**2nd Talk**

**Abstract:**

Data market is an emerging type of cloud service that enables a data owner to sell their data sets in a public cloud. Buyers who are interested in a certain dataset can access the data in the market via a RESTful API. Accessing data in the data market may not be free. For example, it costs USD 12 per month to obtain 100 “transactions” from the WorldWide Historical Weather dataset in Windows Azure Data Marketplace, where a transaction is a unit of result size (e.g., a query result of 4400 records would consume 44 transactions as Windows Azure Data Marketplace confines one transaction to 100 records). Therefore, in this talk, we present PayLess, a system that helps data buyers to optimize their queries so that they can obtain the query results by paying less to the data sellers. Experiments over synthetic data and real data sets in Windows Azure Marketplace show that PayLess can cost-effectively handle SQL query processing over data markets.

**About the Speaker:**

She received the bachelor’s degree in 2010 from Northwestern Polytechnical University, China. She is currently a PhD student in Hong Kong Polytechnic University, under the supervision of Dr. Man Lung Yiu.

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All are welcome!

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