

JOINT SEMINAR

Big Data Institute & Department of Computer Science and Engineering, HKUST

From Answering Questions to Questioning Answers

Prof. Jun Yang

Professor and Associate Chair of Department of Computer Science, Duke University

Date : 9 May 2019 (Thursday)

Time : 4:00pm - 5:00pm

Venue : Rm 2303, HKUST (Lifts 17-18)

ALL ARE WELCOME!

Abstract

Our media are saturated with claims of "facts" made from data. Database research has in the past focused on how to answer queries, but has not devoted much attention to discerning more subtle qualities of the resulting claims, e.g., is a claim "cherry-picking"? In this talk, I will describe a computational framework---which we term "perturbation analysis"---for checking facts based on queries over structured data. This framework lets us formulate practical fact-checking tasks---such as reverse-engineering (often intentionally) vague claims, and countering questionable claims---as computational problems. I will describe some algorithmic and system-building challenges to support perturbation analysis. Finally, I will point out some interesting connections between perturbation analysis and classic database query processing, and show examples of how techniques can be transferred between the two seemingly disparate problems.

About the speaker

Jun Yang has been teaching Computer Science at Duke University since receiving his PhD from Stanford in 2001. He is current a Professor and Associate Chair of the Department of Computer Science at Duke. He is broadly interested in databases and data-intensive systems. He is a recipient of the US National Science Foundation CAREER Award, IBM Faculty Award, HP Labs Innovation Research Award, and Google Faculty Research Award. He also received the David and Janet Vaughan Brooks Teaching Award at Duke. One of his current passions is computational journalism, the idea of leveraging computation to help preserve and advance journalism, especially in the public interest.