

DEPARTMENT OF COMPUTER SCIENCE

SEMINAR

2024 SERIES

Query Processing under the Secure Multi-party Computation Model

DATE & TIME

2 MAY 2024 (THU) 3:00 – 4:00 PM

VENUE

Cheung Ching Lan Diana Memorial Lecture Theatre (WLB204), Shaw Campus



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ABSTRACT

Recently, security and privacy stand as significant hurdles when it comes to data-hungry applications, most notably query processing, data analytics, and machine learning. As a result, the problem answering SQL queries in various security models has attracted a lot of attention, including the well-known secure multi-party computation (MPC) model.

Although generic solutions exist to transform query processing algorithms to MPC protocols, they suffer from significant computational overhead and are primarily of theoretical interest. In this talk, I will give an overview on recent research results on designing specialised MPC protocols. These protocols have made query processing under the MPC model much more practical.



SPEAKER'S
BIOGRAPHY



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