Computer Science Seminar

Privacy-Preserving Query Processing over Encrypted Data in Cloud

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Abstract: The query processing of relational data has been studied extensively throughout the past decade. A number of theoretical and practical solutions to query processing have been proposed under various scenarios. With the recent popularity of cloud computing, data owners now have the opportunity to outsource not only their data, but also the data management tasks to the cloud. Because of data security and personal privacy concerns, sensitive data (e.g. medical records) should be encrypted before being outsourced to a cloud, and the cloud should perform query processing tasks on the encrypted data only.

In this talk, I will present our current research on the development of secure distributed protocols to facilitate query processing over encrypted data hosted in the cloud. I will also explore possible future research directions.

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