

Concordia Institute for Information Systems Engineering

**THE CONCORDIA INSTITUTE FOR INFORMATION SYSTEMS ENGINEERING  
IS PLEASED TO PRESENT THE FOLLOWING GUEST LECTURE IN  
OUR CIISE SEMINAR SERIES**

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**Ms. Li Deng, M.A.Sc. Student  
Concordia Institute for Information Systems Engineering**

**Simulatable Auditing in On-Demand Microdata Release**

How to protect individuals' privacy while releasing microdata tables for analysis purposes has recently attracted significant interests. We study the case where different generalized views of the same underlying secret table may be released upon users' demands. To satisfy privacy constraints, an auditing system must determine based on the history of answered queries whether next query can be safely answered. However, if answering such a query is not safe, denying it may not be, either, since a denied query still conveys sensitive information to an adversary. Inspired by the Simulatable Auditing technique in statistical databases, we propose a safe strategy for answering queries on microdata tables. The strategy can provide not only safe answers but good data utility. We also study how to efficiently maintain an adversarial knowledge base for answered queries. To the best of our knowledge, this is the first study on the safety of microdata query auditing.

**Biography:** Li Deng is currently pursuing her Master of Applied Science degree in Information Systems Security at Concordia University. She has been working on information technology since 2002. Her current research focuses on database security and privacy preservation.

**Thursday, January 29, 2009**

**16:00 – 17:00  
EV003.309**

***Refreshments will be served***  
**(1515 St. Catherine Street West)**

