

Science Faculty of Computer Science 2007–2008 Seminar Series

On the Computational Complexity of Privacy Advisors

By

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As more and more person-specific data like health information becomes available, increasing attention is being paid to confidentiality and privacy protection. One proposed measure of confidentiality is k-anonymity, where a dataset is k-anonymous if each record is identical to at least (k-1) others in the dataset. In this talk, we show that k-anonymization cannot guarantee privacy in the real world, as patients may unintentionally violate the privacy of others by disclosing their own personal information. While there is a need for technology that advises these patients on their actions, current kanonymity research only concentrates on providing solutions for data holders (e.g., hospital) and does not consider data owners (e.g., patients). We define new privacy problems involving data owners and discuss the complexity of these problems.

