From Kinsey to Anonymization: Approaches to Preserving the Privacy of Survey Participants

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Abstract: Preserving the privacy of medical related data becomes even more challenging when the data is obtained from longitudinal studies that were designed to create unique profiles of individual participants. These studies may create participant profiles where each corresponding record is so unique that traditional anonymization techniques cannot be used to generalize and de-identify the record. Therefore sharing of this data with external parties becomes a lengthy process of negotiating specific use agreements. In some cases, sharing of the data among researchers within the organization that owns the data also risks privacy. Even when traditional identifiers are removed, the uniqueness of these records makes re-identification probable for anyone who has access to the complete record. During this talk, I will present a case study of a Kinsey dataset and discuss the challenges of protecting high dimensional data.

Bio: Raquel Hill is an Assistant Professor of Computer Science in the School of Informatics and Computing. Her primary research interests are in the areas of trust and security for distributed and pervasive computing environment and privacy of medical related data. Dr. Hills research is funded by the National Science Foundation and the Center for Applied CyberSecurity Research (CACR). She holds B.S. and M.S. degrees in Computer Science from Georgia Tech and a Ph.D. in Computer Science from Harvard University.

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