Contribution ID: **28**   Type: **Poster Presentation**

A Mechanism for (&epsilon, &delta)-differential privacy using Student's t distribution

Thursday, 28 June 2018 15:00 (2 hours)

The proliferation of data and data analysis has resulted in a need to pay more attention to the security of the the data being analyzed. Different options have been pursued to guarantee privacy of these statistical databases generated. However, most of such options cannot offer guarantee of security of the statistical databases. On the other hand, differential privacy is able to meet such a requirement of security definition. It guarantees privacy of an individual against an adversary with arbitrary auxiliary information. Differential privacy can be categorized as either &epsilon- or (&epsilon, &delta)-differential privacy. In this work, we report a mechanism for (&epsilon, &delta)-differential privacy using Student's t probability distribution. Our results guarantee the privacy and the utility of the mechanism, and this underlines the utility of this mechanism.

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