A Comparison of Input and Output Perturbation based on Statistical and Computational Notions of Privacy

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Statistical disclosure limitation researchers have largely relied on statistical notions of privacy that are based on identity and value disclosure. More recently, computer scientists have considered statistical definitions inadequate and have attempted definitions based on computational efforts to compromise privacy. In this presentation we comment on some aspects of the computational definitions. We also compare input and output perturbation based on both definitions of privacy and conclude that input perturbation should be the preferred approach to statistical disclosure limitation control.