

Session: IPS 161 Formal privacy methods in NSO: Challenges and Solutions

Speaker: John M. Abowd, Chief Scientist and Associate Director for Research and Methodology, U.S. Census Bureau

Title: Differential Privacy and the 2020 Census in the United States

Abstract: The talk will focus on the implementation of differential privacy used to protect the data products in the 2020 Census of Population and Housing. I present a high-level overview of the design used for key data products, known as the TopDown Algorithm. I focus on the high-level policy and technical challenges that the U.S. Census Bureau faced during the implementation including the original science embodied in that algorithm, implementation challenges arising from the production constraints, formalizing policies about privacy-loss budgets, communicating the effects of the algorithms on the final data products, and balancing competing data users' interests against the inherent privacy loss associated with detailed data publications.