

Paper Review #1

Understanding Database Reconstruction Attacks on Public Data is about the privacy of the US census and the different techniques that exist to protect data reconstruction. When databases are released publicly, the owners of the data base must ensure that people's personal data used cannot be traced back to them. However, the US census is not able to ensure the privacy of people's data until they use new techniques such as differential privacy.

Understanding Database Reconstruction Attacks on Public Data focuses on the issues with the US census. The US census collects a lot of data about US citizens and that data can be used to learn personal information about people. Until the US census uses more advanced techniques, US citizens data may not be private.

Question and Answer

What is the problem?

- The problem is that US census is able to reveal personal information as it doesn't use the appropriate privacy techniques.

Why is it interesting and important?

- A lot of money is spent on the census and is important for the citizens of the USA to get the appropriate changes they need. Also citizens have a right to privacy which is threatened by the census if they're not careful.

Why is it hard?

- There's a balance between having a useful but not private census vs a private but not useful census.

Why hasn't it been solved before?

- The exponential growth of information due to technology has made this a big problem in the modern world as it can be used to track or "mind control" citizens.

What are the key components of the proposed approach and results?

- Differential privacy (adding noise) is the best way to keep a database private and the current US census isn't private.