Systemization of Differentially Private Algorithms
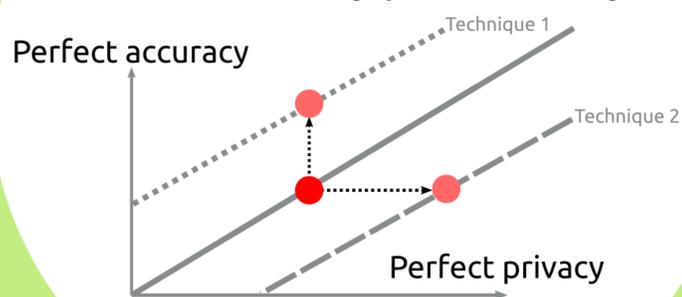
Jenni Reuben
Karlstad University

Boel Nelson
Chalmers University
of Technology

Query

Microsoft Academic

Query 1) **Papers** about **differential privacy** and **histograms**

Query 2) **Papers** about **differential privacy** and **synthetic data**

x → x'

Motivation

Which techniques can be used to improve the accuracy/privacy of differentially private analyses?
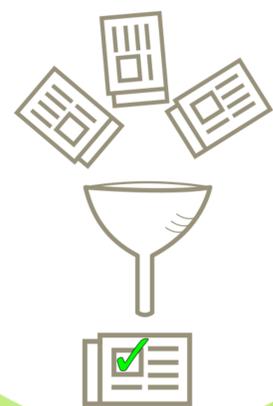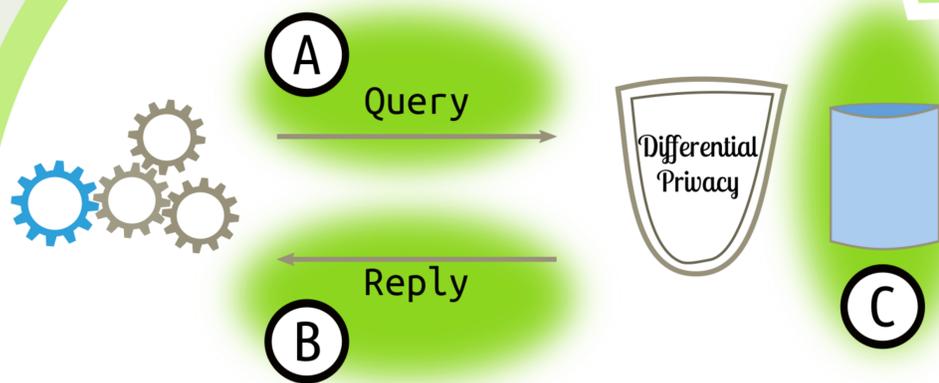
Perfect accuracy

Technique 1

Technique 2

Perfect privacy

Systematic Literature Review (SLR)

1

2

Exclusion

3

Analysis

4

Categorization

A Query

B Reply

Differential Privacy

C

A — Massaging the query

B — Post-processing

C — Pre-processing
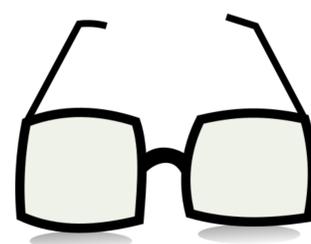
Contact:
jenni.reuben@kau.se
boeln@chalmers.se

KARLSTADS UNIVERSITET 1829

CHALMERS