

How Our Work Benefit Public Safety

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Introduction

Enormous gains in cyber and data infrastructure have led to the routine collection of massive data sets that have substantial value to diverse stakeholders in commercial, government, public health, research, and other sectors. Many large data sets collected by governments are subject to public scrutiny through open government laws. Yet, governments are also demanding greater protections on individual privacy. Further, the public itself is making demands on data collectors and distributors to protect the privacy of individual records.

Benefit the public safety community

The output of the development phase can be used by the public safety community to generate privacy-preserving synthetic datasets based on their sensitive/internal datasets. We target any data in the form of *relational data table*. Publishing such data with privacy protection will help the public safety community to better allocate resources to serve the people, while at the same time respect individual's privacy.

Under Temporal Map Settings

Specifically, temporal map data is of particular interest to the public safety community. Yet the ability to track a person's location over a period of time presents particularly serious privacy concerns. And our submission helps privatize such temporal map datasets, which we imagine can contribute to the spread of huge quantity of such data especially in post-covid times across all kinds of platforms, commercially or for public use.

Raise Awareness and Extend the Reach

Noting that the main developer of our team is an undergraduate student from Peking University, actually she finds that many talents around her in the top2 university of China haven't attached much attention to data privacy research, let alone differential privacy. Nevertheless, during her work in the development contest, many of her friends get to turn an eye to the privacy research field, which quite attracts their interest and stimulates their enthusiasm. Further, we believe it's a good practice to extend the reach of our efforts to raise people's awareness of the public safety privacy concern, and encourage more to dive into and contribute their wisdom to promote progress in the field.