

# Assessing Online Information Exposure Using Web Footprints



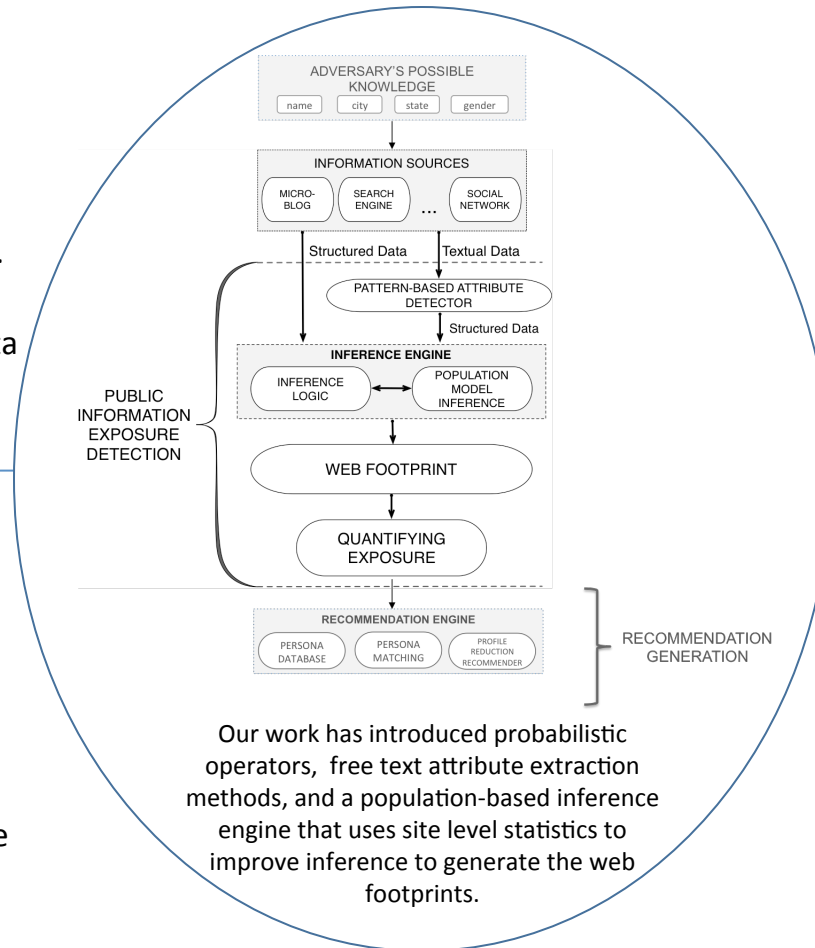
GEORGETOWN UNIVERSITY

## Challenge:

- While people share large amounts of information publicly, they may not understand the potential risks of doing so (stalking, identity theft, job loss, etc.).
- A need exists to help users understand the types of data that can be inferred by combining data from multiple online sources.

## Solution:

- We introduce a novel information exposure detection framework and application that generates and analyzes users' *web footprints*. Then given the level of information exposure of the user, we make recommendations about which attributes to remove from their public profiles to reduce the overall inference potential.



## Scientific Impact:

- Evaluation over public profiles from multiple sites shows that our framework successfully detects and quantifies information exposure using a small amount of non-sensitive initial knowledge.
- The introduction of persona-based recommendations reduce the identifiability of the individual and maintain utility.

## Broader Impact:

- Our framework will make the risks of data leakage more transparent to web users. Then they can make more informed decisions about what types of information they want to share.
- We would like to transition this to one that can be used by students at universities to assess their privacy levels.

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