# I-XRAY: The AI Glasses That Reveal Anyone's Personal Details—Home Address, Name, Phone Number, and More—Just from Looking at Them

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## **Motivations For Building I-XRAY**

Initially started as a side project, I-XRAY quickly highlighted significant privacy concerns. The purpose of building this tool is not for misuse, and we are not releasing it. Our goal is to demonstrate the current capabilities of smart glasses, face search engines, LLMs, and public databases, raising awareness that extracting someone's home address and other personal details from just their face on the street is possible today.

## **Technical Pipeline**

I-XRAY uses five distinct technologies which have only existed in the past few years:

- Discreet Smart Glass Camera (Released 2023): Smart glasses equipped with a camera capture an image of a person's face in public. Meta Ray Bans 2 were used, as they look almost indistinguishable from regular glasses. Note that any hidden camera would achieve the same effect, or a discreet phone picture. If smart glasses didn't exist, I-XRAY would still be just as dangerous.
- 2. **Reverse Facial Recognition (Released 2017)**: The image is processed using facial recognition models similar to those used by search engines like PimEyes and

FaceCheck.id, which can match the face to publicly available images across the internet and returns the URLs. In our testing, Pimeyes was the most effective and accurate to a wide range of people.

- 3. **LLM Data Extraction (Released 2022)**: Once URLs are found, they are scraped, and a Large Language Model (LLM) is prompted to infer details such as the person's name, occupation, and other personal details from this unorganized data.
- 4. **Home Address Lookup (Released 2017)**: FastPeopleSearch, launched in 2017, is an online tool that allows users to easily find personal information such as home addresses, phone numbers, age, and relatives from publicly available records and social media profiles with just someone's name. It aggregates this data into searchable profiles, raising privacy concerns due to the ease with which sensitive details can be accessed.
- 5. Social Security Number Lookup (Released 2023): Cloaked.com takes in phone numbers and returns partial social security numbers (SSNs). This means that if FastPeopleSearch returns an accurate phone number, we can get the first and last digit of someone's SSN. Unfortunately, it seems most Americans have their SSN leaked in data dumps from corporation-level hacks.

## How It's Possible Today with LLMs

What makes I-XRAY unique is that it operates entirely automatically, thanks to the recent progress in LLMs. The system leverages the ability of LLMs to understand, process, and compile vast amounts of information from diverse sources–inferring relationships between online sources, such as linking a name from one article to another, and logically parsing a person's identity and personal details through text. This synergy between LLMs and reverse face search allows for fully automatic and comprehensive data extraction that was previously not possible with traditional methods alone. From the LLM extracted name, a FastPeopleSearch lookup can identify the person's home address, phone number, and their relatives.

#### How to Remove Your Information

Fortunately, it is possible to erase yourself from data sources like Pimeyes and FastPeopleSearch. We are outlining the steps below so that you and those you care about can protect themselves.

1. Removal from Reverse Face Search Engines:

The major, most accurate reverse face search engines, Pimeyes and Facecheck.id, offer free services to remove yourself.

- <u>Pimeyes</u>
- Facecheck ID
- 2. Removal from People Search Engines

Most people don't realize that from just a name, one can often identify the person's home address, phone number, and relatives' names. We collected the opt out links to major people search engines below:

- FastPeopleSearch

- CheckThem
- Instant Checkmate
- Extensive list compiled by the New York Times
- 3. Preventing Identity Theft from SSN data dump leaks

Most of the damage that can be done with an SSN are financial. The main way to protect yourself is adding 2FA to important logins and freezing your credit below:

- Freezing Your Credit (by Vox)

Extensive list of data broker removal services

Interested in learning more about I-XRAY and digital privacy, or contacting us? Fill out this <u>form</u> and we'll follow up.