

## Background Information

This infographic from Pastor-Galindo et al. (2020) can help ou organi e our thinking about collecting OSINT.

These three phases are collection, ansils, and kno ledge etraction:

Fig e 1 OSINT W kf a d he I e ige ce De i ed f I

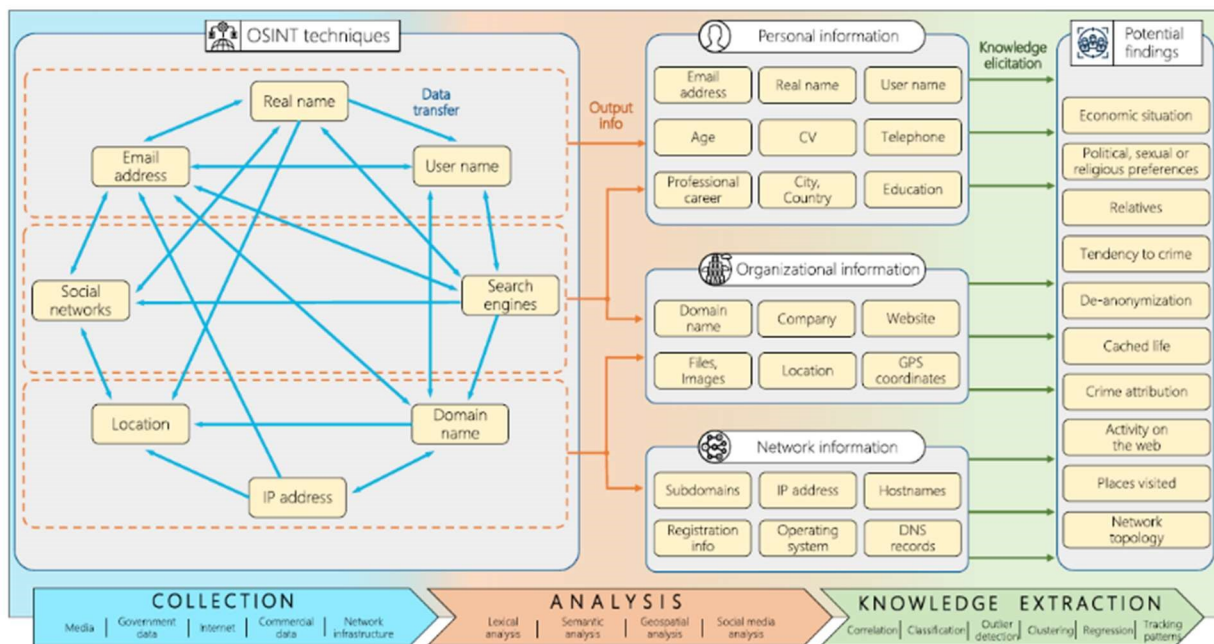


FIGURE 2. Principal OSINT workflows and derived intelligence.

The N Ye E i ed G d i e f OSINT O i ie O e Cha e g a d F e T e d EEE ACCE JAVIER PASTOR GALINDO PANTALEONE NESPOLI FÉLIX GÓMEZ MÁRMOL AND GREGORIO MARTÍNEZ PÉREZ

In the **daa c eci hae**, e see that there are at least eight possible techniques for finding information on someone:

(1) real name, (2) user name, (3) search engines, (4) domain name, (5) IP address, (6) location, (7) social networks, and (8) email address. There is also a ninth technique not discussed b Galindo et al, and that is an (9) image. In other ords, e ma ha e a person s real name and that is hat e use to find more data about that person. Or, e ma ha e an IP address and e can use that to being searching for more data.

E perimenting ith tools is integral to this phase because different entities ha e different t pes of information a ailable online and some tools ill be more beneficial than others. In this phase, ou are collecting and organi ing the data, and then erif ing the accurac of the data. Sa an in estigator has onl a nickname of a leader of a local

gang. In this phase, the investigator must collect additional information. As you move through this phase and our tools have given you accurate pieces of data, you start to move into the phase where you are analyzing the data.

In the **analysis** phase, the investigator tries to organize relevant data around three different entities: (1) people, (2) organizations, and (3) networks. Cybercrime investigators are most likely focusing on people and networks of people (to investigate them), while cybersecurity professionals are most likely focusing on networks of computers and organizations (to protect them). The idea in this phase is to start sifting through your data and putting the data together in a coherent way. You want to move from data to information. Let's say the nickname of the gang leader is Buckle T. Through a search on social media you find many people with that username, and one who has posted images that look like where Buckle T operates. You are certain that this profile is the person you are interested in and so you then go and collect more data: who his associates are, what he posts about, etc. Finally, you have enough to get a real name and even more information. A good OSINT investigation may end up with pages of text, images, known associates, contacts, financial information, etc. You don't want all of this information; instead you want the information that matters for you or your employer.

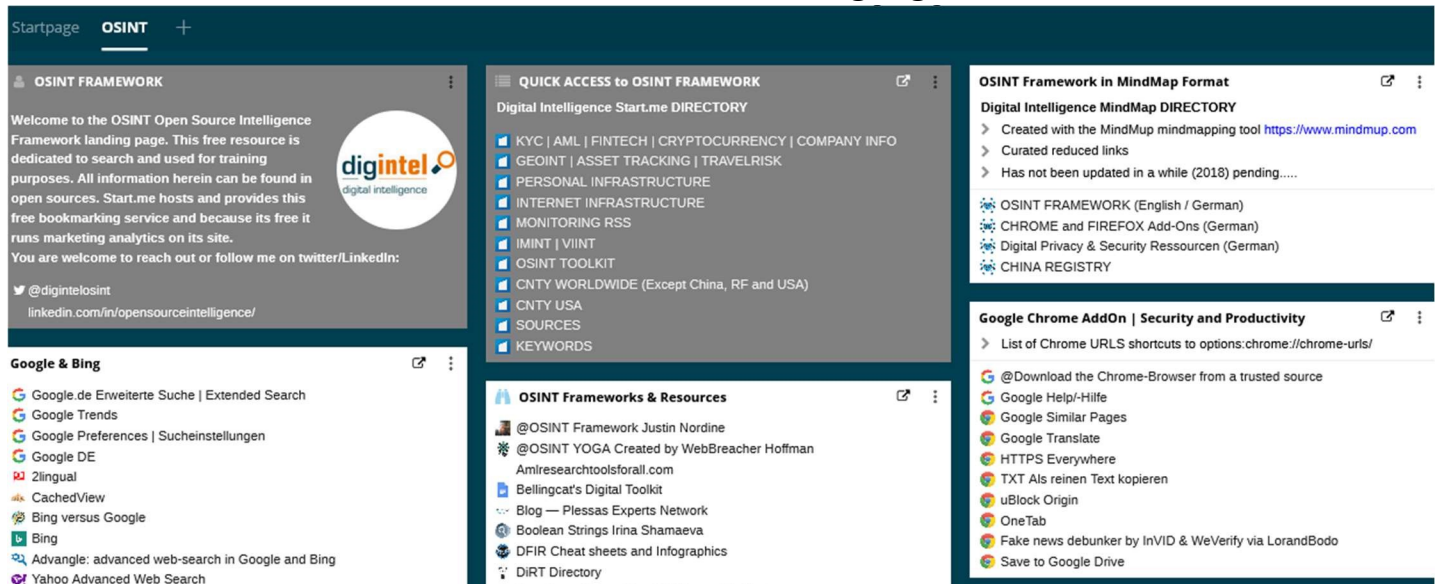
Finally, you move from information to knowledge in the **knowledge acquisition** phase. Taking the information you have and answering a question or coming to a conclusion about something is producing knowledge. Using our gang member Buckle T, you may see that he associates with several hardened characters who have been arrested in the past for dealing heroin. Moreover, you have been able to find his real name and address: Brad Jenkins, and see that he dropped out of high school but has been seen around town in an expensive car. You conclude that Buckle T is likely the leader of a drug trafficking enterprise. You have produced this knowledge through passive OSINT techniques that did not alert Jenkins to the investigation or put yourself in danger. In reality, all OSINT investigations start with some question(s) that need to be answered. As Pastor Galindo et al. (2020) show in their diagram, some of these questions can be (1) political, sexual, and religious preferences, (2) tendency to crime, (3) current life (collecting and storing a target's life events), (4) activity on the web, and (5) places visited.

### Collection Tools

There is a strong and vibrant open source intelligence community. You can learn more about this community (and most of the tools used) through the OSINT Open Source Intelligence Framework Landing Page -

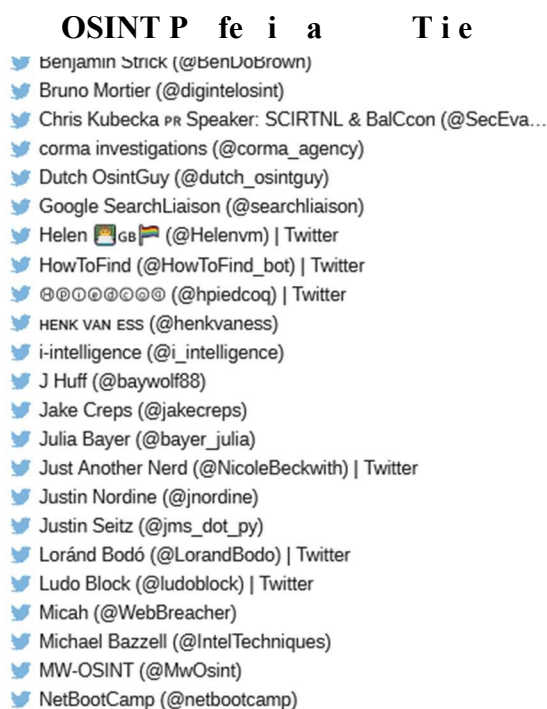
<https://start.me/p/ZME8nR/osint>, which looks like this:

**Figure 2**  
**Screen of OSINT Landing Page**



If you are thinking of breaking into the field, it may be worthwhile to follow some of the professionals interested in OSINT (found towards the bottom of the landing page):

Figure 3

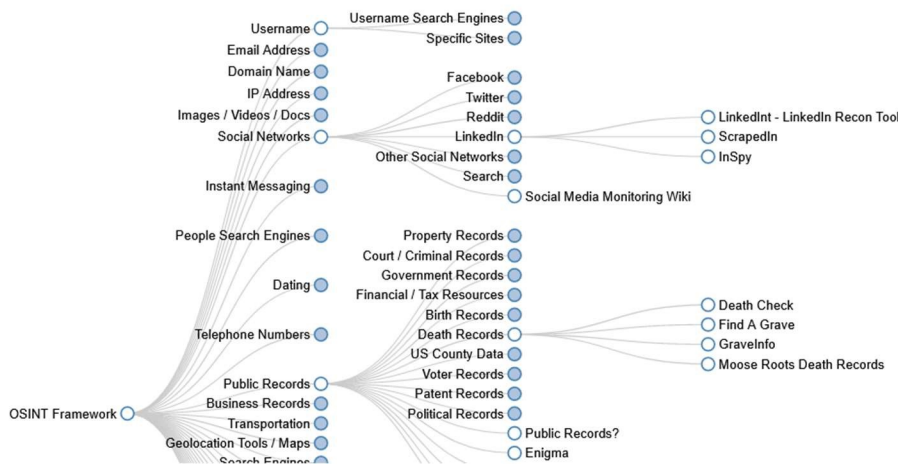


There is a wealth of tools available for an OSINT analysis. I am showing this page for OSINT-curious students who wish to dig deeper on their own time. For this class, we will focus on a wonderful web site made by Justin Nordine (@jnordine) called the OSINT Framework : <https://osintframework.com/>, shown in Figure 4.

The site organizes data collection (this includes eight types that are shown in Figure 1 plus much more). The site is a well-designed mind map that many people will find useful when they first begin an investigation. Eventually, you may want to avail yourself of more tools from the landing page. But for now, you should start with Nordine's organized page for the tools needed for data collection.

Fig e 4

## The OSINT Framework



### Assignment

OSINT investigations are done for a purpose. However, me as an instructor asking a class to collect personal information about a person even if the information is public, and even if it is for educational purposes borders on being unethical. Many people unrelated or not connected to that person could then be aware of that person's contact information, their social media presence, and their life cache.

Instead, you will demonstrate our OSINT skills by selecting a person you want to know more about and then investigating them!

1. Think in our mind about how who you want to investigate. Now, think of reason why you want to investigate them. This reason can be thought of as the question you want to answer in our OSINT investigation. What is that question or question? (1.) Possible questions are:

- A. What does this person do for a career
- B. What is her education
- C. Does she show good character
- D. What is the Political Ideology of the person

Start the data collection phase. Select four different tools from the OSINT framework to collect data about the person you are investigating. From above, there are nine ways of starting an investigation: (1) real name, (2) user name, (3) search engines, (4) domain name, (5) IP address, (6) location, (7) social networks, (8) email address, and (9) an image. You already know the person's name! So this is what you use to start our investigation. **Provide a screenshot of each tool** and describe what type of data the tool will provide for you. (1.)

**Real Name: Karian Martinez**

**Username:**

**Social Networks:**

**Both of these tools will provide information about the users social media accounts and potential username information.**

Instagram

Log In

Sign Up



martinezkarian

Follow

...

52 posts

383 followers

481 following

**Karian Martinez**

Military spouse, mother of two, Real Estate Agent in VA

[findvirginiabeachvahomes.com/team/karian-martinez-licensed-real-estate-agent](https://findvirginiabeachvahomes.com/team/karian-martinez-licensed-real-estate-agent)

facebook

Email or phone



Password



Log



**Karian Martinez**

622 likes • 613 followers

Posts

About

Photos

Videos

...



## Karian Martinez

Local Outreach volunteer. at CASY-MSCCN  
Career Corps

CASY-MSCCN Career Corps .

Polytechnic University of Puerto Rico

South Mills, North Carolina, United States · [Contact info](#)

28 connections



**Connect**

**Message**



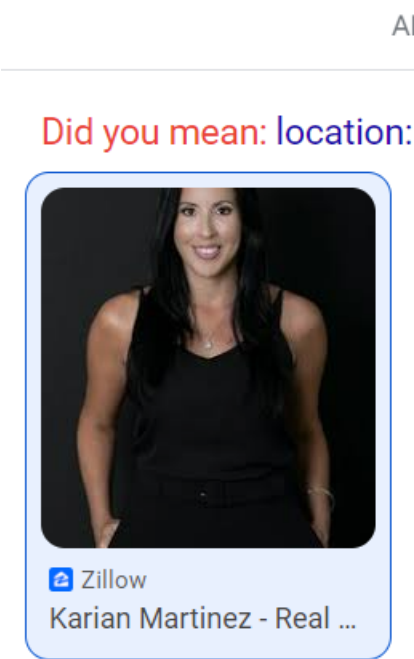
## Activity

28 followers

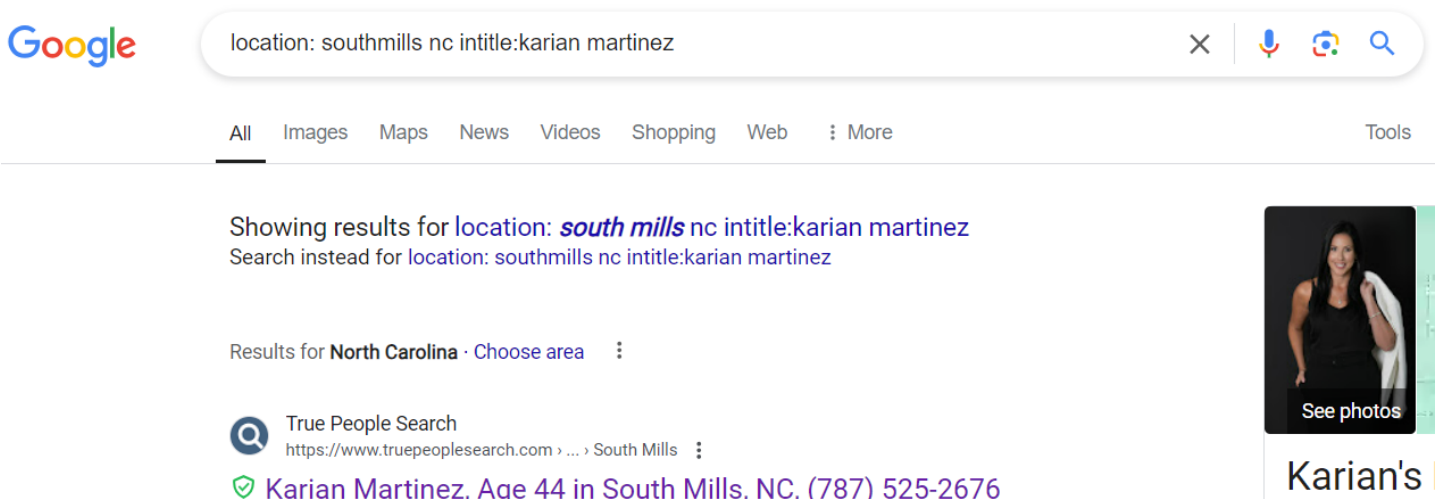
**Karian hasn't posted yet**

Recent posts Karian shares will be displayed here.

**Image:** Provides visual data of the individual’s physical appearance



**Search Engine:** Helps find information which provides list of relevant results based on users search query



**Location:** Provides information where the individual lives or has lived




Figure 8

TruePeopleSearch

Karla Martinez


City, State or Zip

View Full Background Report



Also Seen As

Karian Martinez Morales, Karian R Martinez Morales, Morales Karian Martinezn  
Morales Karian R Martinez, Raquel Martinez Karian, R Martinez Morales Karian



Current Address

114 Dock Landing Loop  
South Mills, NC 27976  
\$454,000 | 3 Bed | 2.5 Bath | 2543 Sq Ft | Built 2004  
Camden County  
(Jan 2016 - Nov 2024)

**Domain Name:** This tool can provide many information like individual, Ips, and network technology

**IP address:** This tool can provide device information, and geolocation

Here are the results from a few Geolocation providers. Is the data shown below not accurate enough?  
Please read [geolocation accuracy](#) info to learn why.


Do you have a problem with IP location lookup? Report a [problem](#).



Warning: 192.168.12.1 is a private IP address.


Geolocation data from


IP2Location


Product: DB6, 2024-11-1


 IP ADDRESS: 172.59.117.11


 COUNTRY: United States 


 REGION: Virginia

 CITY: Norfolk


 ISP: T-Mobile USA Inc.

 ORGANIZATION: Not available

 LATITUDE: 36.8468

 LONGITUDE: -76.2852

[Incorrect location? Contact IP2Location](#)

 [view map](#)

2.Turn the data you collected into information. Given What you have collected, write a five or six sentence summary about the person you investigated. Remember, you can collect pages of data about

someone. You can collect all their social media posts, all the places they've lived in and the history of those places, all their relatives or associates, etc. But you need to turn that data into information by selecting the most relevant data linking them together in a summary. (1.)

**Based on the information selected here is a summary of Karian Martinez. She is currently 44 years old, who lives in 114 South Mills, North Carolina. Has lived in that location for the past 8 years and still is currently located there. She works as a realtor for Prodigy Realty Group, LLC. She has two from of education. One from the Polytechnic University of Puerto Rico, where she earned her master's degree in business administration with concentration in Human Resources. The other in the Universidad de Puerto Rico, with a bachelor's in Commercial Publicity**

3. Turn the information you have collected into knowledge. Answer the question you posed at the beginning of our in your investigation in a few sentences. Explain how the information you collected help you answer that question. (1 .)

**The data collected has helped answer the questions I have listed. Each tool has provided information about her location, images that can provide visual cues of her characteristics, information about her careers, and level of education.**

**Karian Martinez is a real estate agent for Prodigy Realty Group, LLC. She has a master's degree in business administration with concentration in Human Resources, and a bachelor's in Commercial Publicity. Also, based on the images, and her social media account she seems to be a good character. After some digging, I eventually found some evidence of her political Ideology. She is leading towards more the republican side.**

**For some reason when I downloaded the file and uploaded it into word the word got a bit mess up.  
I do not know why this occurred.**