# Cyber Security Essentials Lab 7 – Open-Source Intelligence (OSINT)

#### Task 1: OSINT

Read and understand about OSINT. Write about OSINT in your own language.

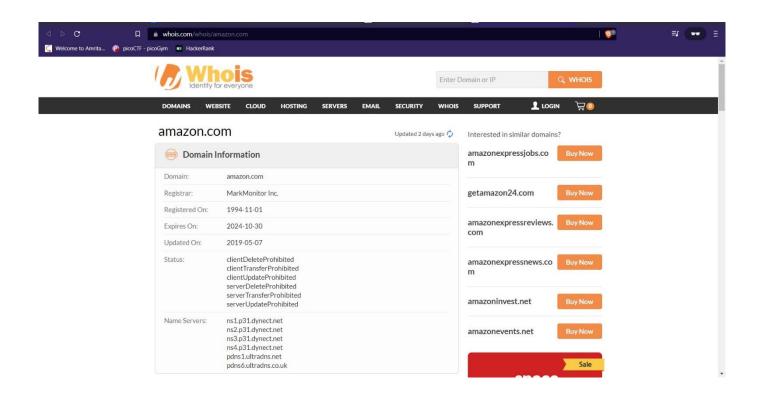
The insight gained from processing and analysing public data sources such as broadcast TV and radio, social media, and websites is known as open-source intelligence (OSNIT). Text, video, image, and audio data are available from these sources.

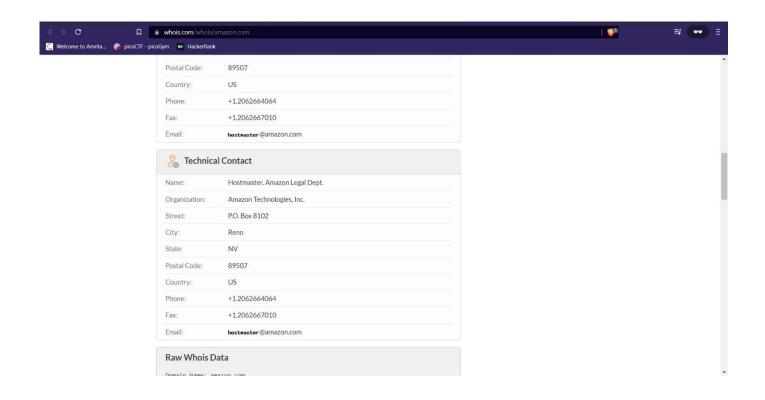
The analysis is based upon machine learning and deep neural network algorithms which enable the system to learn from the data to achieve and refine recognitions of patterns, trends, and relationships.

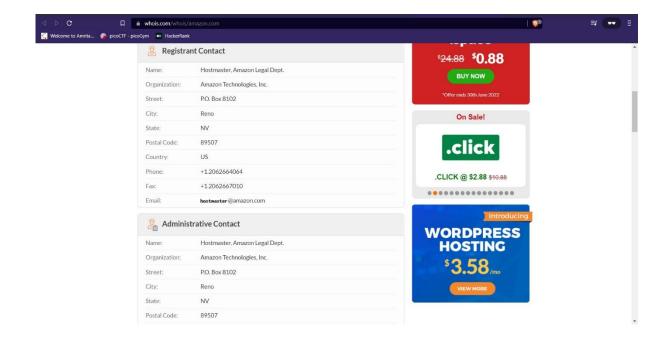
### Task 2: WHOIS

Go to <a href="https://www.whois.com/">https://www.whois.com/</a> and search for any website. See what all information you are getting about that domain.

Whois is a widely used Internet record listing that identifies who owns a domain and how to get in contact with them. The Internet Corporation for Assigned Names and Numbers (ICANN) regulates domain name registration and ownership.

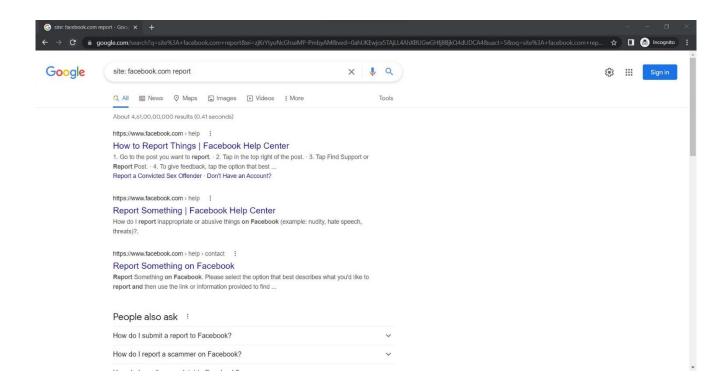


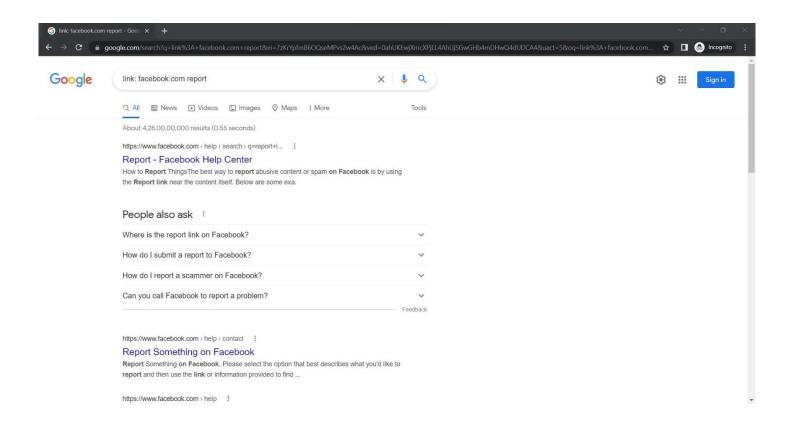


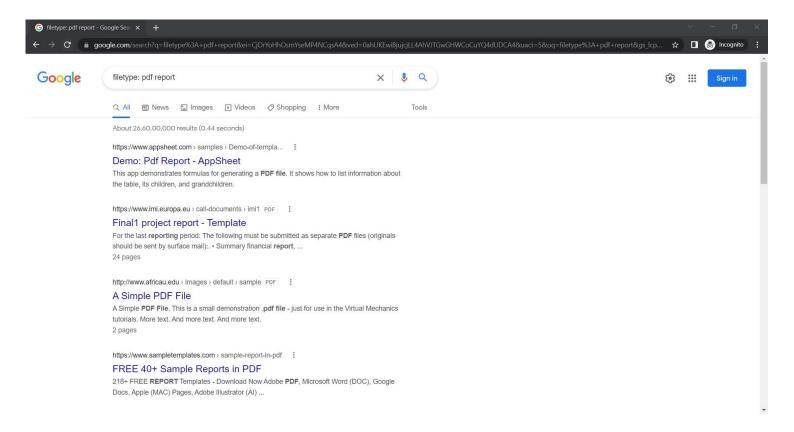


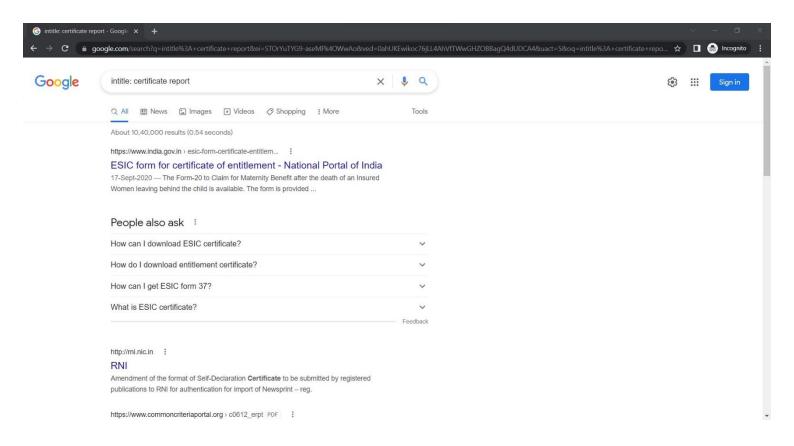
## **Task 3: Google Hacking**

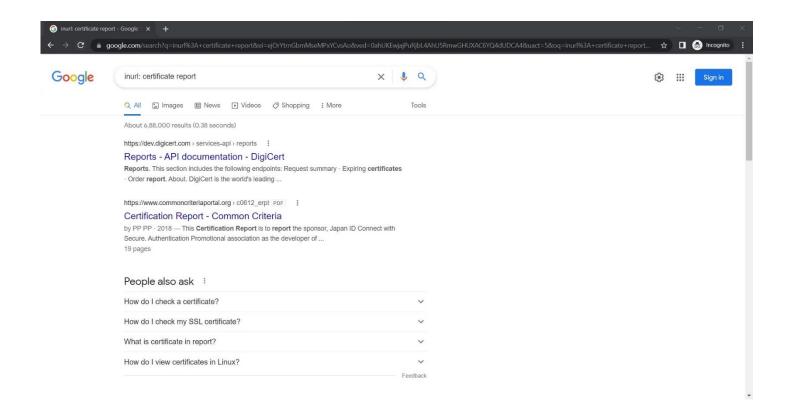
Read about google hacking and make a note on it. Use below commands after changing the website name and searched text 'report'. You can choose any website and text of your own.

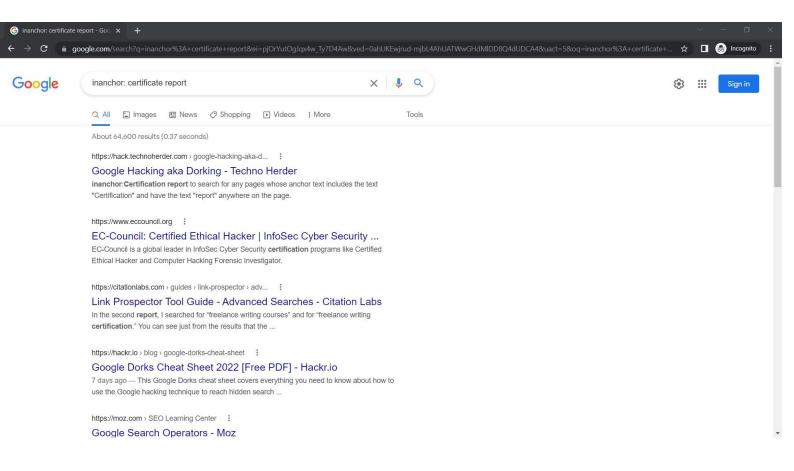








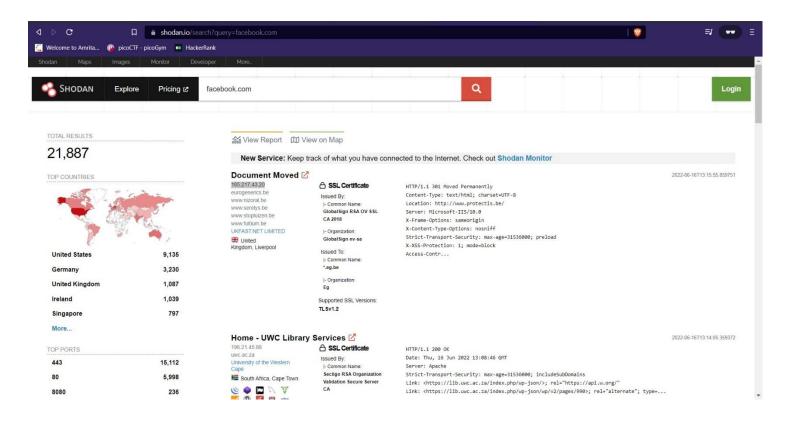




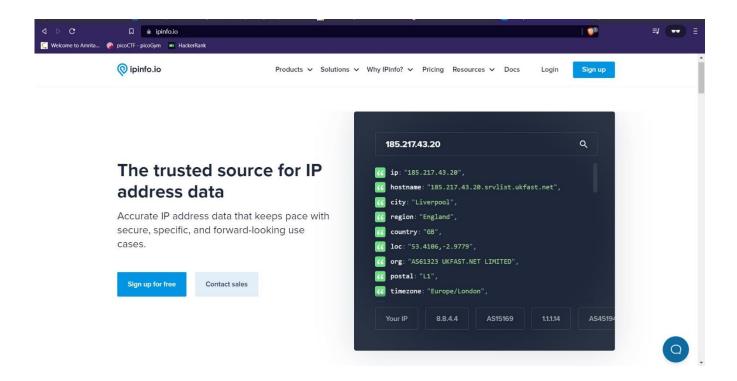
## Task 4: shodan and ipinfo

Go to https://www.shodan.io/ and search for some website. See what all information you are getting from there. Select one IP from the result and search it on https://ipinfo.io/website.

Shodan is a search engine that lets users search for various types of servers (webcams, routers, servers, etc.) connected to the internet using a variety of filters. Some have also described it as a search engine of service banners, which are metadata that the server sends back to the client.

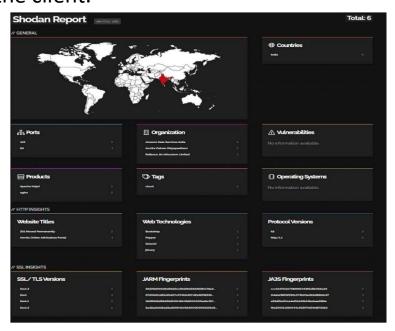


IPinfo is an industry-leading IP data provider specializing in IP to geolocation, ASN, IP to company, VPN detection, IP to carrier, IP ranges, and hosted domain data.

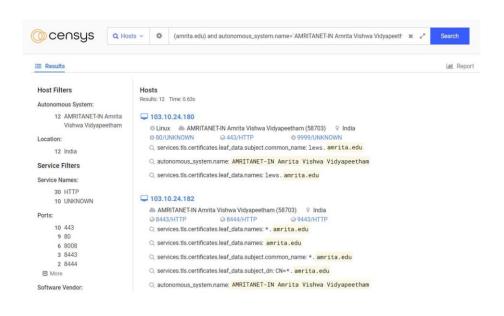


Task 5: Go through below website, search for any URL and document your finding.

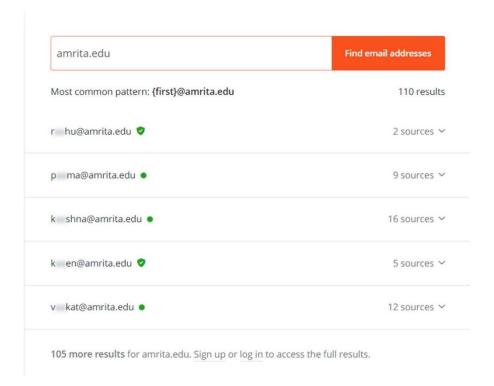
Shodan is a search engine that allows users to search for different types of servers connected to the Internet using a variety of filters. Some have also described it as a service banner search engine, which is metadata that the server sends to the client.



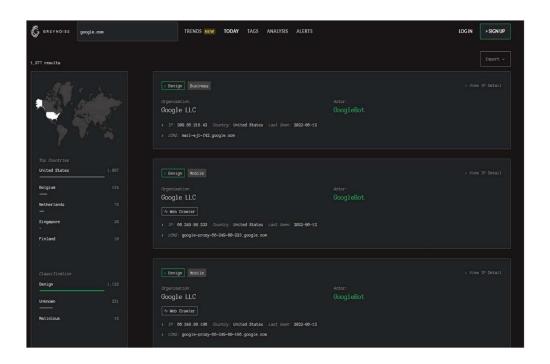
Censys.io (www.censys.io) is a web-based search platform for evaluating the attack surface for internet-connected devices. The tool can be used not only to identify Internet-connected and Internet of Things/Industrial Internet of Things (IoT/IIoT) assets, but also Internet-connected industrial control systems and platforms.



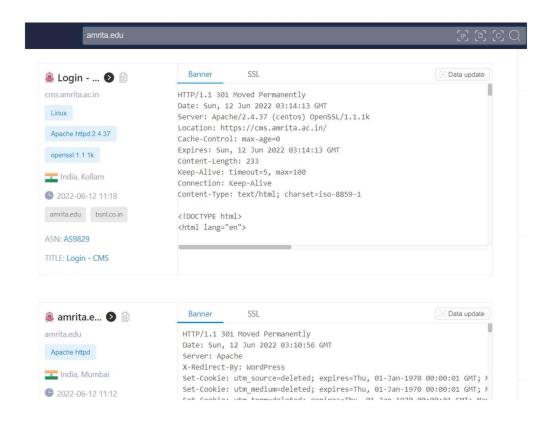
Hunter.io, aka Email Hunter, is an email hunter tool that helps marketers find the contact information associated with any domain. This is ideal for companies that use cold emailing as a way to fill their pipeline.



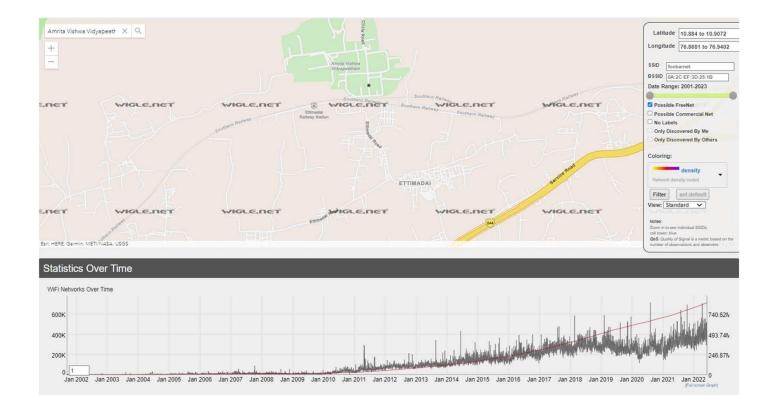
GreyNoise helps analysts spot events that aren't worth their attention. GreyNoise indicators are likely associated with opportunistic scanning of the web or broader enterprise services, not targeted threats.



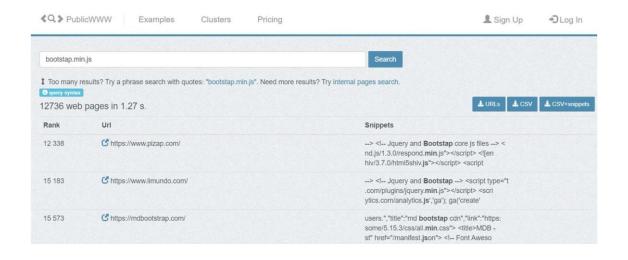
ZoomEye is the world's leading provider of cyberspace mapping, China's first and world-famous cyberspace search engine powered by 404 Laboratory of Knownsec, and also a world-famous cyberspace search engine.



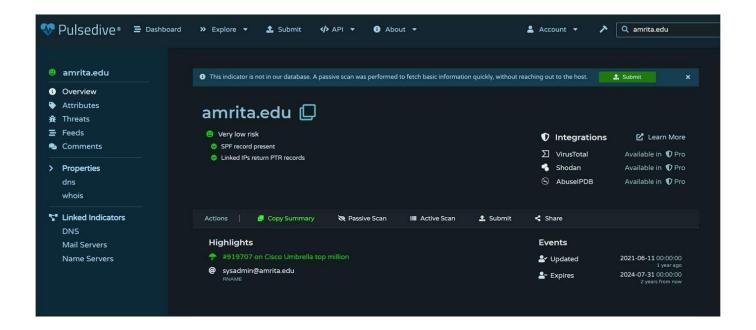
WiGLE is a website for collecting information about the different wireless hotspots around the world. Users can register on the website and upload hotspot data like GPS coordinates, SSID, MAC address and the encryption type used on the hotspots discovered.



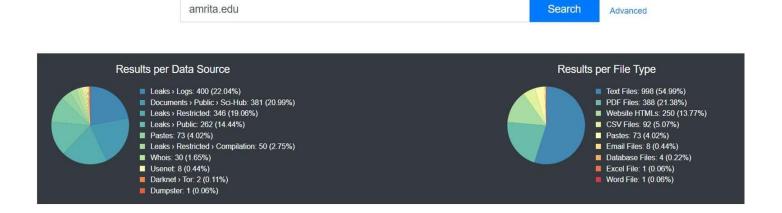
PublicWWW is a digital marketing and affiliate marketing research tool that finds any alphanumeric snippet, signature or keyword in webpage HTML, JS and CSS code. PublicWWW is a useful tool for affiliate marketing and digital marketing research.



Pulsedive is a free analyst-centric threat intelligence platform that offers comprehensive, enriched threat intelligence from user submissions and threat intelligence feeds, equating to over 5 million IOCs searchable, completely free, at pulsedive.com.



Intelligence X is a search engine and data archive.



Reposify is the new way organizations manage and protect their global network perimeter.

