Advanced Open Source Intelligence Gathering

By

Nick Furneaux – CSITech Ltd

Course Description

This course focuses on the investigators ability to gather open source information on people, groups, companies or even countries, from the Internet. Rather than just using 'advanced' Google searches and other web sites we will be leveraging the tools available to look 'under the surface' of the internet, accessing data gleaned by understanding database API's used by Social Networks and others, creating our own data scraping collection methods and other skills rarely taught.

The 4-day course is completely hands-on and will teach a range of skills from staying anonymous, setting up false online identities, extracting data without using a 'web site', collating the data using Maltego and graphing and visualizing data both historical and in real-time.

The course has been completely overhauled for 2017 with each section updated and brand new skills and capabilities included. For example we have now added sections on advanced video and image analysis to geo-locate and confirm the authenticity of media through observation alone.

Other advanced Open Source courses are available, but not like this.

The course will include a 2-week license for Maltego (latest version), 3 months international VPN access, an encrypted 16 Gig USB 3 drive, many software tools and a 550+ page colour course manual.

Course Goals

1. To equip the student with the skills to carry out highly advanced techniques of searching the Internet whilst remaining anonymous.

2. To enable the student to be familiar with specialist software tools and understand the results.

3. The introduce little known online resources.

4. For the student to understand and practically apply API techniques to directly talk to the underlying databases of Social Network sites and advanced data scraping abilities where no database access exists.

5. To enjoy a 'hands-on' course throughout the 4 days.

Course Content

Preparing the right mindset

Legal restrictions

Creating the right toolkit

      Encryption of data

      Understanding the dangers of system caches

      Using Virtual Machines

Getting our thinking right

      Mindset

      Digital shadow

      Mapping Pattern of Life

Learn Maltego Case file

Learn Maltego Radium

Preventing the leaking of our own data

      Spoofing certain data to confuse an attacker

Bouncing anonymously around the world – Proxies and VPN's

Setting up your own false identities

Removing data about ourselves from the Internet

Understanding the benefits of Virtual Machines

Graphing trends and seeing the future

Creating our own news aggregator

Advanced geo-mapping techniques

Web site and Internet Network mapping and detailed information gathering

  Including new automated network data gathering

Finding and analyzing data relationships

Finding people and aliases

Doing bad things with Google

  Finding Documents and meta data extraction

  Using your skills to understand your own vulnerabilities

  Checking if hackers have released your/corporate information

  Find data that REALLY shouldn't be public!

Understanding and exploiting email

Getting inside websites

  Geolocation

  Metadata and 'authorized' access to hidden folders

  Extracting data to spreadsheets

Getting under the hood of Social Media

  Talking directly to the databases of networks via their API

  Building data scrapers for any social network

    Facebook

    Instagram

    Twitter

    Periscope

Advanced Image and Video analysis

  Methods for visual geolocation

Methods for acquiring data and time without metadata

Finding and exploiting hardware devices on the Internet of Things

Mapping the internet infrastructure of a country or large organization.

In depth, real world practical's throughout the week including researching a potential new Board member, finding and profiling a hacker threat and planning an attack on a real company.

Requirements

The student should have a basic understanding of Open Source Intelligence gathering and be comfortable with online researching.

Cost

Total cost - £1850 + VAT including manual, software and USB key. Lunches and snacks also included.