List of Trainings for Crime Analysts from the Manhattan DA's Office 11/30/2020

- Trainings
 - Law Enforcement/Analyst
 - Open Source Intelligence (Training & free tools)
 - https://inteltechniques.com/
 - https://www.toddington.com/
 - http://www.automatingosint.com/blog/ (programming focused)
 - FBI LEEP (cyber classes)
 - http://www.iacpcybercenter.org/topics/training-2/free-training-for-law-enforcement/
 - National White Collar Crime Center (NW3C)
 - https://www.nw3c.org/online-training
 - National Domestic Communications Assistance Center
 - https://ndcac.fbi.gov/
 - AskNDCAC@fbi.gov
 - Northeast Counterdrug Training Center
 - SEARCH Online Investigations
 - http://www.search.org/
 - SANS, CCE Boot camps (different vendors offer this), all the Forensic companies offer training for their own product so use what is familiar for you.
 - National Computer Forensics Institute
 - https://www.ncfi.usss.gov/ncfi/
 - Federal Law Enforcement Training Center
 - https://www.fletc.gov/
 - High Intensity Drug Trafficking Area (HIDTA)
 - Los Angeles HIDTA Instruq
 - o https://instruq.co/
 - Excel (free)
 - https://excelexposure.com/
 - https://www.gcflearnfree.org/excel2016/
 - https://support.office.com/en-us/excel
 - https://exceljet.net/
 - YouTube (excel tutorial playlists, specific tasks, etc.)
 - Programming
 - Organized
 - General Assembly boot camp
 - Coding Classes general
 - Self-help (general many are free)
 - Lynda
 - Udemy
 - Skillshare
 - Khan Academy
 - Code Academy

- Coursera
- YouTube
- Self-help (Python specific)
 - https://automatetheboringstuff.com/
 - https://www.learnpython.org/
 - https://www.codecademy.com/learn/learn-python
 - https://learnpythonthehardway.org/
 - http://docs.python-guide.org/en/latest/intro/learning/
 - http://timothybramlett.com/Learn_Python Lesson 1.html
 - https://www.python.org/about/gettingstarted/
 - https://www.reddit.com/r/learnpython/wiki/index
 - https://github.com/EbookFoundation/free-programming-books.md#python
 - https://github.com/Michael0x2a/curated-programmingresources/blob/master/resources.md
 - http://opentechschool.github.io/python-data-intro/core/text-files.html
 - https://www.hackerrank.com
- Self-help (R specific)
 - Programming language for statistics/graphics
 - https://www.datacamp.com/
 - https://www.rstudio.com/online-learning/
 - http://tryr.codeschool.com/
 - https://www.r-bloggers.com/how-to-learn-r-2/
- Products (general list not all used at DANY)
 - Accessdata (Forensic Tool Kit) www.accessdata.com
 - Accurint
 - Adobe Photoshop
 - o Amped Software Products
 - ArcGIS Mapping
 - ArcGIS Online (Online Interactive Maps)
 - Audacity
 - Autopsy (SANS) this is a Free forensic tool (www.sleuthkit.org)
 - o Blacklight (This is predominantly for MACs) www.blackbagtech.com
 - CarFax for Police
 - Cellebrite
 - o CLEAR
 - Crystal Reports
 - Dcode (Technical time conversion)
 - Encase (Guidance Software)
 - eTrace (Firearms Tracing)
 - ffmpeg (convert video)
 - o Forensic Explorer (<u>www.forensicexplorer.com</u>)
 - Google Earth
 - HIDTA PIMS Facial Recognition

- o i2 Analyst Notebook
- o ISO ClaimSearch
- JABS (US Marshall Prison Search)
- o Leads Online
- Leap
- o LENS (Federal)
- Microsoft Movie Maker
- Microsoft Office
- NDCAC Tools
- NDEx (National Data Exchange FBI)
- N-Force (ATF Database)
- Notepad++
- o Omniforms/Complaint Database
- Oxygen (Phone Analysis) <u>www.oxygen-forensic.com/en/products/oxygen-forensic-detective</u>
- o Palantir
- o Pen-Link
- o Perceptive Workgroup Search
- PerpHound (NW3C)
- o Python
- o qGIS
- o R
- ShotSpotter
- Snaglt
- Spotlight
- Surveillance Players
- o Thunderbird (Mozilla email client handling SW compliance)
- TLOxp
- Truecrypt/Veracrypt
- Voyager
- VLC Video Player
- o X1 Search
- X1 Social Discovery
- Xanalys Link Explorer
- o XMind

Data Management Techniques

- Regular expressions
 - Searching for patterns rather than specific text (ex. phone numbers, emails, addresses, etc.)
 - https://regex101.com/ -- learn and test regular expressions
- o https://spreadys.wordpress.com/ (forensic video blog relating to surveillance video)
- o http://www.search.org/resources/e-crime-investigative-tools/
- o http://www.search.org/resources/publications/law-enforcement-tech-guides/
- VBA for automating Microsoft Office tasks (Excel, Word, Outlook, etc.)
- Remember Techniques are based on the type of case and where data may exist on a device (think as you are the end user)

- On-line hiring locations (e.g., Indeed.com)
 - Local universities
 - o Professional organizations
 - https://www.iaca.net/
 - o Local Career Center Agencies
 - o Indeed.com
 - o Stackoverflow.com/jobs

Excel Shortcuts

```
ctrl + arrow = jump to the end of a section
shift + arrow = extend selection by one cell
ctrl + shift + arrow = extend selection to end
ctrl + a = select all
ctrl + shift + l = toggle filters on/off
ctrl + c = copy
ctrl + x = cut
ctrl + v = paste
ctrl + alt + v = paste special
F2 = \text{jump into a cell to edit it}
F4 = toggle relative/absolute references for a range
ctrl + ; = enter current date
ctrl + shift + ; = enter current time
alt + = Starts to select the menu on the toolbar. You can do
```

almost anything in Excel this way.

Excel Formulas Cheat Sheet

```
Basic math
                                                     Dates
Sums and averages (replace A1:A8 with your range):
                                                     Create excel date:
=SUM (A1:A8)
                                                     =DATE (year, month, day)
=AVERAGE (A1:A8)
                                                     Count days between two dates:
Count non-empty cells with numbers:
                                                     =DAYS (A1, A2)
=COUNT (A1:A8)
                                                     Editing Text
Count all non-empty cells:
=COUNTA (A1:A8)
                                                     Combine multiple text cell:
                                                     =CONCATENATE (A1, A2, A3...)
Conditions
                                                            example:
Make cell value conditional on something:
                                                            =CONCATENATE ("A", "B", "C")
=IF(condition, if true, if false)
=IF(A1=1234, "thenthis", "otherwisethis")
                                                     Extract just part of text:
Sum under certain conditions (example: greater than 2):
                                                     =MID(cell/text, start, number chars)
=SUMIF(range, condition, [opt. sum range])
=SUMIF(A1:A8,">2")
                                                            example:
                                                            =MID("123456",3,3)
                                                            345
Sum if another column is something:
=SUMIF (A1:A8, 1234, B1:B8)
                                                     Remove extra spaces in text:
                                                     =TRIM(A1)
Combine a count with an IF statement:
=COUNTIF(range, condition)
=COUNTIF (A1:A8, 2223335555)
                                                     Convert text to uppercase, lowercase, or "proper":
                                                     =LOWER (A1)
COUNTIF to flag duplicates:
                                                     =UPPER(A1)
=COUNTIF($A$1:$A$50,$A1)
                                                     =PROPER(A1)
      * remember to drag formula down entire column
```