In this month's Online Research and Intelligence Newsletter, we discuss: Upcoming TII Training Events, How to Analyze Black Swans , and provide you with the latest OSINT news and resources.

Toddington International Inc.

Online Research and Intelligence Newsletter

JULY 2014 EDITION

IN THIS EDITION:

WELCOME TO THE NEWSLETTER

Welcome to the July newsletter. We are taking time over these summer months to rest (just a little) after the busiest first two quarters in our company's history and prepare for what is shaping up to be an exciting Fall season.

e-Learning Completions

Congratulations this month to all of those who have recently completed our Using the Internet as an Investigative Research Tool™ e-Learning program including Patrick O'Brien - London Drugs Limited Loss Prevention, Stephen Berthelot - Department of Finance, Province of New Brunswick, Keith Galick - Royal Canadian Mounted Police, J Elford, Michael McDonald - Winnipeg Police Service, Ben Robinson - Ageas Insurance, Danijela Stavnjak - Bridgewater Bank, Melanie Rousseau - Canadian Institute for Financial Crime Analysis and Julia Goodman - Rebmormax Consulting.

Have Questions About Our Services or Upcoming Events? Contact us:

- **By Email**: contact@toddington.com
- **By Phone**: +1 (604) 468-9222 [UTC - 7 hrs]

OSIRA Inaugural Conference Report

OSIRA

OPEN SOURCE INTELLIGENCE AND RESEARCH ASSOCIATION

We were pleased to participate in the Open Source Intelligence and Research Association (OSIRA) inaugural conference on May 7th and 8th in London. With over 120 delegates attending from around the world, this premier event attracted a wide range of experts within the OSINT sphere and fostered some fascinating discussion. A newly formed non-profit organization, OSIRA is dedicated to supporting Open Source professionals through information sharing, defining industry standards and providing professional accreditation for practitioners. The next OSIRA conference is scheduled for early December in Hong Kong, more information will soon be available at www.osira.net.

Upcoming Training: United Kingdom

3 Day Advanced Internet Intelligence Workshop at the University of Cambridge

September 21-24, 2014

Queens' College, Cambridge

With attendance at the Spring 2014 Internet Intelligence workshop at Cambridge University fully subscribed, we are pleased to be again presenting this 3-day programme September 21 through 24, 2014 in conjunction with International Chamber of Commerce Commercial Crime Services.

This advanced training program takes place at beautiful Queens' College at the University of Cambridge. After a welcome dinner on the Sunday evening in the luxurious dinning hall, delegates will be provided with their own laptop computer (theirs to keep after the event) that they will optimize for peak efficiency and increased security while conducting online research and investigations. Monday evening will feature the opportunity to go punting on the River Cam followed by dinner at the famous Eagle Pub. Tuesday evening delegates have the option to partake in a walking tour of some of the historic colleges of Cambridge University followed by dinner at La Mimosa, a traditional, fine Italian restaurant situated on the river bank. With attendees representing government, military and law enforcement agencies from around the world, in addition to representatives of numerous Fortune 500 companies, this workshop represents a tremendous networking opportunity.

Tuition includes accommodation, meals and social events and seats are booking quickly - for more information and to reserve your place, visit the ICC-CCS web site.

Upcoming Training - Canada

3 Day Advanced Internet Intelligence Training

Vancouver September 15-17, 2014

Toronto October 6-8, 2014

In today's Information based economy, online research and analysis skills are essential requirements at all levels of an organization.

Aimed at private and public sector researchers, investigators, analysts and managers, this internationally acclaimed, fully revised and updated three-day training course will give you the skills you need to become highly efficient in using the Internet as an Open Source Intelligence, Investigation and Research Tool.

Attendees will receive expert instruction on the latest online research tools and analytical techniques, a comprehensive collection of training materials, a secure, personally-configured laptop computer to keep (optional), membership to OSIRA (The Open Source Intelligence and Research Association) and a one-year subscription to TII's Premium Resources Knowledge Base.

Course will include topics such as :

- an introduction to Open Source Intelligence (OSINT) analysis
- advanced Internet tools including web archive
- the advantages (and disadvantages) of different web browsers
- foreign language search and translation
- finding hidden and removed web pages
- advanced search engine usage
- saving and preserving Internet sourced information
- RSS and news aggregators
- searching maps, videos and news
- advanced meta, federated and clustering search tools
- searching social networks and user generated content

- searching and analyzing blogs, boards, forums, discussion groups
- searching the Deep Web and the Dark Web
- webpage analysis, domain tools and IP addresses
- privacy, security, virtual private networks and proxy servers

Vancouver: September 15th – 17th, 2014
Toronto: October 6th – 8th, 2014

Changing our World: The Internet of Things

by Kristan Wheaton

Image by Fir0002 via Wikimedia

Black swans, we are told, are both rare and dramatic. They exist but they are so uncommon that no one would predict that the next swan they would see would be a black one.

The black swan has become a metaphor for the limits of the forecasting sciences. At its best, it is a warning against overconfidence in intelligence analysis. At its worst (and far too often it is at its worst), the black swan is an excuse for not having wrung every last bit of uncertainty out of an estimate before we make it.

One thing does seem clear, though: We can have all the information and structured analytic techniques we want but we can't do a damn thing in advance about true black swan events. They are, by definition, unpredictable.

Or are they?

Imagine a single grain of sand falling on a table.

And then another. And then another. While it would take quite some time, eventually you would have… well… a pile of sand.

Now, imagine this pile of sand growing higher and higher as each single grain falls. The grains balance precariously against each other, their uneven edges forming an unsteady network of weight and weaknesses, of strengths and stored energy, a network of near immeasurable complexity.

Finally, the sandpile reaches a point where every time a single grain falls it triggers an avalanche. The vast majority of times the avalanches are small, a few grains rolling down the side of the sandpile. Occasionally, the avalanches are larger, a side of the pile collapsing, shearing off as if it had been cut away with a knife.

Every once in a while – every once in a long while – the falling of a single grain triggers a catastrophe and the entire pile collapses, spilling sand off the edge of the table and onto the floor.

The sandpile analogy is a classic in complexity science but I think it holds some deep lessons for intelligence analysts trying to understand black swan events.

Just as we cannot predict black swan events, we cannot predict which precise grain of sand will bring the whole sandpile down.

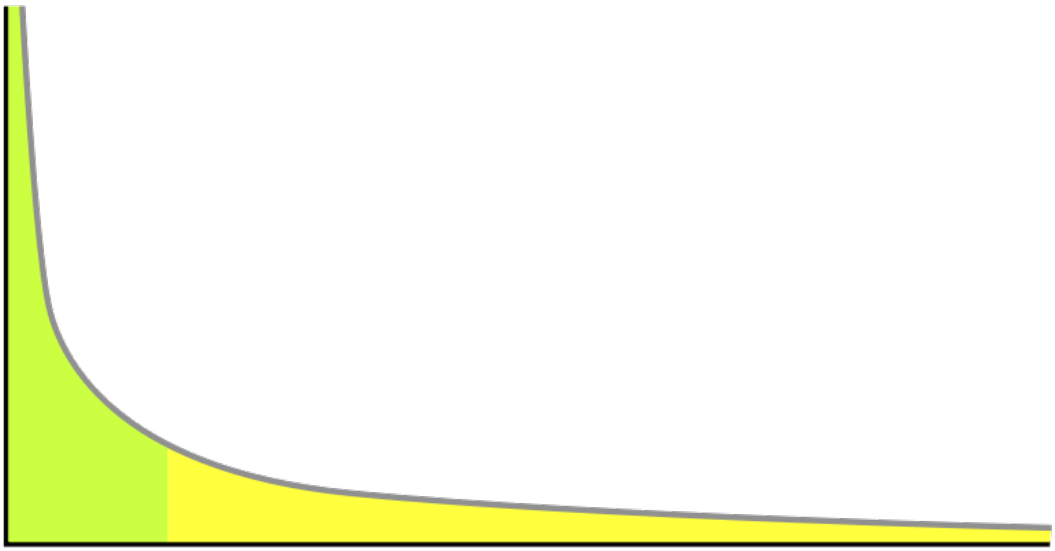
Yet, much of modern intelligence focuses almost exclusively on collecting and analyzing the grains of sand – the information stream that makes up all modern intelligence problems. In essence, we spend millions, even billions, of dollars examining each grain, each piece of information, in detail, trying to figure out what it will likely do to the pile of sand, the crisis of the day. We forecast modest changes, increased tensions, countless small avalanches and most of the time we are right (or right enough).

Yet, we still miss the fall of the Soviet Union in 1991, the Arab Spring of 2010, and the collapse of the sandpile that began with a single grain.

What can we do? It seems as though intelligence analysts are locked in an intractable cycle, constant victim to the black swan.

What we can do is to move our focus away from the incessant drumbeat of events as they happen (i.e. the grains of sand) and re-focus our attention on the thing we can assess: The sandpile.

It turns out that “understanding the sandpile” is something that complexity scientists have been doing for quite some time. We know more about it than you might think and what is known has real consequences for intelligence.



An example of a power law, or long-tail, distribution

In the first place, for the sandpile to exhibit this bizarre behavior where a single grain of sand can cause it to collapse or a single small incident can trigger a crisis, the pile has to be very steep. Scientists call this being in the critical state or having a critical point. More importantly, it is possible to know when a system such as our imaginary sandpile is in this critical state – the avalanches follow something called a “power law distribution”.

Remember how I described the avalanches earlier? The vast majority were quite small, a few were of moderate size but only rarely, very rarely, did the pile completely collapse. This is actually a pretty good description of a power law distribution.

Lots of natural phenomena follow power laws. Earthquakes are the best example. There are many small earthquakes every day. Every once in a while there is a moderate sized tremor but only rarely, fortunately, are there extremely large earthquakes.

The internet follows a power law (many websites with few links to them but only a few like Google or Amazon). Wars, if we think about casualties, also follow a power law (There are a thousand Anglo-Zanzibar Wars or Wars of Julich Succession for every World War 2). Even acts of terrorism follow a power law.

And the consequences of all this for intelligence analysts? It fundamentally changes the question we ask ourselves. It suggests we should focus less on the grains of sand and what impact they will have on the sandpile and spend more resources trying to understand the sandpile itself.

Consider the current crisis in Crimea. It is tempting to watch each news report as it rolls in and to speculate on the effect of that piece of news on the crisis. Will it make it worse or better? And to what degree?

But what of the sandpile? Is the Crimean crisis in a critical state or not? If it is, then it is also in a state where a black swan event could arise but the piece of news (i.e. particular grain of sand) that will cause it to appear is unpredictable. If not, then perhaps there is more time (and maybe less to worry about).

We may not be able to tell decisionmakers when the pile will collapse but we might be able to say that the sandpile is so carefully balanced that a single grain of sand will, eventually, cause it to collapse. Efforts to alleviate the crisis, such as negotiated ceasefires and diplomatic talks, can be seen as ways of trying to take the system out of the critical state, of draining sand from the pile.

Modeling crises in this way puts a premium on context and not just collection. What is more important is that senior decisionmakers know that this is what they need.

As then MG Michael Flynn noted in his 2010 report, Fixing Intel:

"Ignorant of local economics and landowners, hazy about who the powerbrokers are and how they might be influenced, incurious about the correlations between various development projects and the levels of cooperation among villagers, and disengaged from people in the best position to find answers – whether aid workers or Afghan soldiers – U.S. intelligence officers and analysts can do little but shrug in response to high level decision-makers seeking the knowledge, analysis, and information they need to wage a successful counterinsurgency."

The bad news is that the science of complexity has not, to the best of my knowledge, been able to successfully model anything as complicated as a real-time political crisis. That doesn't erase the value of the research so far, it only means that there is more research left to do.

In the meantime, analysts and decisionmakers should start to think more aggressively about what it really means to model the sandpile of real-world intelligence problems, comforted by the idea that there might finally be a useful

way to analyze black swans.

Kristan J. Wheaton is Associate Professor of Intelligence Studies at Mercyhurst University. He regularly publishes articles on his blog at http://sourcesandmethods.blogspot.com and can be reached at kwheaton@mercyhurst.edu

eLearning: Using The Internet as an Investigative Research Tool

The most comprehensive and up-to-date Internet Research e-Learning program available anywhere, "Using the Internet as an Investigative Research Tool" is designed to enable investigators, researchers and intelligence personnel to find better online information, in less time, at less cost, with less risk".

For a fraction of the cost of a classroom based training course, our flexible and interactive virtual classroom environment allows candidates to progress at their own pace and competency level with a qualified personal instructor on hand at all times to ensure success. Initially launched in 1998, this highly acclaimed and continually updated online course has been successfully completed by over six thousand investigators and knowledge workers around the world.

"This information packed course was comprehensive, well-constructed and presented in a format which takes the student through the steps of learning

on-line skills at a pace which allows for good understanding of the materials presented. I would highly recommend (and have done) that anybody interested in this area take this course. I was particularly impressed at the balanced and easily understood way in which the various areas were covered. This is a course which someone with a reasonable level of computer skills can take and become proficient in without having to have years of IT expertise, and yet come away with a high level of knowledge of the principles of Online Investigative research. This approach gives the student the confidence to challenge themselves and improve, which is the best recommendation for any kind of course."

(Comment from recent e-Learning attendee)

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Useful Sites and Resources for Investigators

- http://geshout.com/mapscompare/all.php - Compare different map interfaces, including Google and Bing Maps
- http://www.gramfeed.com/instagram/search - Search Instagram photos, users and places
- http://www.talkwalker.com/en/social-media-analytics-search/ - Social media search, monitoring and analytics tool, with free alerts feature
- http://grasswire.com - Collaborative, real-time, fact-checked news reports
- http://pgp.mit.edu - MIT PGP Public Key Server
- http://citizenevidence.org - Amnesty International introduces website for journalists to verify citizen videos
- http://mouselock.co - Find out who tried to use your computer in your absence
- http://www.hvr.me - Uncover social media profiles for individuals
- https://otr.cypherpunks.ca - Off-the-Record Messaging software
- https://onionshare.org/ - File sharing tool that utilizes Tor
- http://labs.five.com - Tool that analyzes posts of a Facebook user to “predict” their personality

- http://keyhole.co - Searches and tracks hashtags, keywords or URLs in real-time on Twitter, Facebook and Instagram
- https://openmedia.ca/myinfo - Designed to help Canadians find out what personal info telecom providers are collecting about them
- https://www.dayview.com/login.php - Daily news aggregator (includes social news), filterable by subject, available in 20 countries
- http://nuzzel.com - Social news reader for Twitter and Facebook
- http://www.blogdigger.com/index.html - Blog search engine
- http://healthsocialytics.com - Health Social Predictor: Social health analytics and predictions
- http://sociadictor.com - Social Predictor: Analyzes big data from social networks for trends and future predictions
- http://httparchive.org/websites.php - Archive of website performance data
- http://ubersuggest.org - Find out what keyword combinations are being used to query you or your company online
- http://geosocialfootprint.com - Revealing a Twitter user's location via their online footprint
- http://foller.me - Provides Twitter analytics for any public Twitter profile
- http://when-where.net/?lon=139.6926&lat=35.6669&zoom=13&date=2014-07-29 - Searches for geo-tagged images by location, filterable by date
- http://builtwith.com - Reveal a website's mail service provider, advertising partners, tracking widgets, plugins and more
- http://wefeel.csiro.au - Twitter search tool that analyzes emotions in real-time
- http://www.qsearch.cc - Facebook timeline search tool
- https://search.motherpipe.com - Privacy-oriented search engine that promises not to track you or to share your information
- http://www.oaddo.org/home - Innovative search engine in early alpha stage, available in 40 different languages
- https://www.wetransfer.com - File sharing utility for larger files
- http://truthy.indiana.edu/botornot/ - Tool that calculates the likelihood of whether a Twitter account is a "social bot"
- http://www.rpxcorp.com - New searchable database of patents, litigation cases and entities
- http://www.izitru.com - Determine if an image is an original or modified
- http://www.hashatit.com - "The Social Search Engine" for searching hashtags from various social networks
- http://crowdriff.com/riffle/ - Riffle: Chrome add-on for real-time Twitter analytics
- https://www.eff.org/privacybadger - Add-on/extension that blocks advertisers and other third-party trackers from tracking your web browsing activities

- http://recovermywebsite.com - Tool for recovering a lost website
- https://www.whodoyou.com - Local business search aimed at providing transparent and authentic recommendations
- http://www.ip-adress.com/trace_email/ - Easy-to-use email tracing utility
- http://www.conweets.com - Track Twitter conversations between two Twitter users
- http://app.teachingprivacy.com - Find out how easily your physical location can be identified by mapping your social media posts
- http://myip.ms - Comprehensive IP address database, includes host and physical location information among other details
- http://www.chillingeffects.org/copyright/search.cgi - Search copyright infringement complaints against websites
- http://www.studyblue.com - Find, create, and share study flashcards and notes using your mobile device
- http://www.boxoh.com - Universal package tracking tool that lets you track UPS, FedEx, USPS, & DHL shipments on a map
- http://deadurl.com - Preview URLs that no longer exist via archives
- http://ge.tt - Online file sharing tool that allows users to preview files with real-time tracking - no plugins needed
- http://cloudmonitor.ca.com/en/ping.php - Ping a website to see if it's available in other countries using a network of 90+ monitoring stations
- http://tif.mcafee.com/heartbleedtest - McAfee Heartbleed vulnerability test
- https://www.sendpluto.com - Free email service enabling users to "unsend" and edit emails with their existing email client/address
- https://www.followupthen.com - Set reminders and schedule email follow-ups
- https://bubbl.us - Online mind mapping/brainstorming tool
- http://www.whoishostingthis.com - Web hosting search tool for determining the host of any website
- https://filippo.io/Heartbleed/ - Handy tool to check to see if the Heartbeat extension is enabled and vulnerable on a web server
- http://cybermap.kaspersky.com - Real-time, interactive cyberthreat map
- http://www.google.co.in/elections/ed/in/districts - Google Politics and Elections: "Know Your Candidates" tool for India
- http://www.similarsitecheck.com - Search engine for locating similar websites
- http://timerime.com - Create and share timelines that include images and videos
- http://safeweb.norton.com - Norton Safe Web: For determining website safety ratings
- http://mypermissions.org - Find out which apps and online services have permission to access your private information
- http://scr.im - "Scrim" your email address for sharing online and get less

spam

- http://ctrlq.org/rss/ - Google powered search engine for finding topic-based RSS feeds
- https://search.disconnect.me - Search tool that routes searches via proxy, allowing users to privately search major search engines
- http://unfurlr.com - Tool that reveals the underlying link behind a short URL, without having to click on it
- http://maps.nyc.gov/crime/ - New York City Crime Map
- http://www.coralcdn.org - Site that lets you access other websites that are temporarily unavailable due to high traffic
- http://twofactorauth.org - List of websites that support two factor authentication, and those that do not!
- https://www.screenr.com - Web-based screen recorder
- https://tagboard.com - Social media hashtag search
- http://www.threatglass.com - Searchable tool that catalogs and analyzes compromised sites and malware attacks
- https://redbooth.com - Team collaboration, task management, file sharing and communication platform (5 free users)
- http://www.policymap.com - Data mapping tool; includes crime statistics and demographics, among other data sets (free 1 week trial)
- http://www.instantstreetview.com - Generates Google Street View instantly
- http://issuu.com - Over 15 million documents available for free download (growing by 25K docs daily)
- http://www.protectmyprivacy.org - Protect My Privacy (PMP) lets you protect the personal information on your (jailbroken) iPhone
- http://mailtester.com/testmail.php - Email address verification tool that identifies mail servers
- https://search.nerdydata.com/images - Image Locator: Find out where an image appears on the Web

Upcoming Training Singapore

Advanced Online Investigations 2-Day

October 16-17, 2014

Presented by Innoxcell Click here for more details

Also of Interest...

- “Is your iPhone an iSpy?” http://goo.gl/40TvGO
- Deep Data vs. Big Data http://goo.gl/40AjTu
- “How to Use Twitter Analytics to Find Important Data” http://goo.gl/i35HFJ
- All about Boolean search statements http://goo.gl/EBIQSt
- “21 Things You Can Do With Google” http://goo.gl/r03cpU
- "Browser 'fingerprints' help track users" http://goo.gl/jDnr0J
- Useful resources for fact-checking breaking news http://goo.gl/cvYHJW
- "I know where your cat lives" - Revealing privacy issues with what you share online http://goo.gl/iqCtnj
- NCMEC reports that online child abuse is currently surging http://goo.gl/cYo5FX
- Map plotting real time hacking attacks "collected from darknets in hundreds of locations in 40+ countries" http://goo.gl/dZTP7j
- "What emergency data law means for you" http://goo.gl/2m5e9p
- The need for distributed search engines explained http://goo.gl/UrjB7w
- “How to Protect Your Privacy on Facebook” http://goo.gl/dJkA1D
- “Bing Ups Its Twitter Game: Rolls Out Hashtag & Twitter Handle Search Features” http://goo.gl/Pdr6IC
- “10 Free Crypto Apps To Help Protect Your Online Privacy” http://goo.gl/6T5oMH
- “5 things DuckDuckGo does better than Google” http://goo.gl/9HJjme
- Compilation of 15 must-know Google Chrome tips and tricks http://goo.gl/bGCkyC
- “Off the Beaten Path: 6 Unusual Ways to Use Pinterest” http://goo.gl/MZoV8m
- 4 Tips for protecting your Facebook privacy http://goo.gl/BdBeYk

- “How to Save Tweets for Any Twitter Hashtag” http://goo.gl/ZW85XX
- “It's Time To Admit The Amount Of Information Google Gathers About Us Is Terrifying” http://goo.gl/g3hBs8
- Cheat sheet containing useful shortcuts for DuckDuckGo http://goo.gl/pRrhRe
- Useful tips on how to find out who an email address belongs to http://goo.gl/5odAEj
- Must-know commands and queries to get the most out of Facebook Graph Search http://goo.gl/qkDvpE
- “How to Anonymize Everything You Do Online” http://goo.gl/5mdXDS
- “5 Ways to Find Trending Topics (Other than Twitter)” http://goo.gl/S8sM2I
- “5 Tools to Monitor Your Online Reputation” http://goo.gl/Vnf8dU
- “Here's What Happens On Facebook Every 10 Seconds” http://goo.gl/aBkngP
- “This Hack Allegedly Lets You Figure Out People's Private Friends Lists On Facebook” http://goo.gl/kTMwBL
- “12 quick tips that will save your digital life from getting hacked” http://goo.gl/vr3USH
- “The Internet Is Now Part Of The Crime Scene” http://goo.gl/Ty9RQI
- “Going Dark: The Internet Behind The Internet” http://goo.gl/45vXyf
- “A Privacy Expert's 3 Tips to Protect Yourself Online” http://goo.gl/gjSTTl
- Researching people and companies - "Searching Secrets of Professional Cyber-Sleuths" http://goo.gl/vz444z
- “LAPD has a new tool for crowdsourcing photo and video evidence” http://goo.gl/PmJB6h
- “How to Set an Auto-Expiry Date for Shared Files and Folders in Google Drive” http://goo.gl/wsoEC7
- “16 powerful browser extensions that bend the web to your will” http://goo.gl/CnzGPM
- New to Google+? “A Beginners Guide to Google+” http://goo.gl/XjbOFM
- Find out if your accounts have been hacked with these sites http://goo.gl/8AJ7uw
- “15 Firefox Collections To Suit Your Online Browsing Needs” http://goo.gl/931xnr
- Want to disappear online? Here’s how! http://goo.gl/TGCo0p
- Facebook's "nearby friends" feature: What you need to know! http://goo.gl/4HVpmn & http://goo.gl/BuXwos
- "Grams" the new dark web search engine modeled after Google searches multiple dark net markets via Tor http://goo.gl/VpZ68Q
- Protecting your online identity: The DO's and DON'TS http://goo.gl/Dj6C8f
- “The Best Online Tools To Know Everything About a Website” http://goo.gl/IOzLgZ
- London's public bike data reveals where you have been http://goo.gl/V4syBA

- “The Heartbleed Hit List: The Passwords You Need to Change Right Now!” http://goo.gl/dHUucB
- “Use These 6 Extensions To Improve Privacy & Security On Firefox” http://goo.gl/MTDKkN
- “Sweeping Away a Search History” http://goo.gl/Zto19n
- Interesting DuckDuckGo search operators http://goo.gl/NFdL03
- “How To Delete Facebook, Google, And Twitter Search Data” http://goo.gl/d2NIoI
- “How Boolean Search Improves Your Social Media Monitoring” http://goo.gl/NN8Y4a
- Secure your LinkedIn account with these few steps http://goo.gl/2Wazoy
- Verification handbook for journalists and aid providers on handling user-generated content during emergencies http://verificationhandbook.com
- “How Your Tweets Reveal Your Home Location (using your last 200 tweets)” http://goo.gl/CYXvyz
- For Google Users: 10 "need-to-know" Google URLS http://goo.gl/u5FALw
- LinkedIn search tips and tricks http://goo.gl/PfRSzY
- Advanced Twitter search tips http://goo.gl/LhvOem
- Crime fighting with big data weapons http://goo.gl/Xds3Iy
- “The Deep Web: Everything You Need to Know in 2 Minutes (Video)” http://goo.gl/hTJG0B
- How to check if an email address is valid and exists, without sending a test email http://goo.gl/9Gkcdt
- New Bing search feature: Image Match http://goo.gl/bIJ9ty
- “22 File-Sharing Tools for Easy Collaboration” http://goo.gl/BN3VwB
- 10 Useful, and somewhat hidden, Google Chrome features; including incognito mode http://goo.gl/PkwVpo
- “How To Create A New Digital Identity" using freely available tools http://goo.gl/qCHtzF
- “How to delete your Facebook search history” http://goo.gl/o8kbzt