News, Resources and Useful Information for the Online Investigative and OSINT Professional from Toddington International Inc.





## **Toddington International Inc.**

Online Research and Intelligence Newsletter

JANUARY 2018 EDITION

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#### Welcome to the Newsletter

Welcome to the January 2018 edition of TII's Online Intelligence Newsletter – from all of us here at Toddington International Inc., we wish you a very Happy New Year!

## Julie Tillotson Appointed as TII Associate



We are pleased to welcome Julie Tillotson as the newest member of the TII team.

With over two decades service within the Royal Canadian Mounted Police, Julie began her career as an Intelligence Analyst in 2002.

Continuing to maintain operational expertise in complex

delivery of services to the private sector including critical thinking and investigative techniques, corporate intelligence, brand protection and online reputation management.

While working towards her PhD, Julie taught Criminology and Sociology at the University of Winnipeg and the University of Manitoba. She has also taught Tactical Intelligence Analysis and Strategic Intelligence Analysis at the Canadian Police College, and has delivered Operational Intelligence Analysis training in South Asia on behalf of the Canadian Government.

Among other commendations, Julie has been awarded the Intelligence Program Professional Service Award for her contributions to the national intelligence program in the RCMP, and is a regular guest speaker at numerous private and public sector conferences throughout North America.

#### **Hunted Returns to Channel 4**



Featuring TII's David Toddington and <u>Colin Crowden</u>, the hit television series "**Hunted**" returns this month and launches an exciting third season in the UK (see the trailer here).

The <u>Daily Telegraph's Michael Hogan</u> gave the program 4 out of 5 stars saying, "Taut, tense and cleverly edited, Hunted made white-knuckle viewing for a cosy winter's night. With its glitchy camerawork and snazzy graphics, it was styled like a spy film and just as engaging. I found myself yelling at the screen and taking the side of the underdog. The thrill of the chase remains powerful."

Hunted airs Thursdays at 9pm on Channel 4 and is available on demand.



# Completely Revised and Updated E-Learning Program Now Available



Unable to attend one of our classroom based training programs?

The **completely revised and updated edition** of our highly acclaimed e-Learning program **Using the Internet as an Investigative Research Tool™** has now been

Take advantage of the benefits of e-Learning and this time limited offer including:

- Higher retention
- · Reduced training time
- Flexible, self-paced learning
- Access to a qualified personal instructor
- Cost-effective
- Content is delivered in smaller, manageable units
- · Location and time is at the convenience of the student
- Travel and associated expenses are eliminated
- A one-year subscription to TII's Premium Resources Knowledge Base (a \$299 value)
- Canada Revenue Agency T2202A tax receipts for Canadian students

To learn more, download a brochure, and sign up for fast access, click here.

#### **E-Learning Graduates**

Congratulations to the following students who are among those who successfully completed the 40-hour <u>Using the Internet as an Investigative</u>
Research Tool™ e-learning program with TII this month:

- Privanka Sharma
- Andrew Sandoval
- Lindsey Potvin
- Alyssa Aitken
- Ryan Jessop
- John Ready
- Rebecca Jaehnke
- Blair Mangan
- Matt Fadden
- Elizabeth Drew
- Corey Clarysse
- Johnathan Ryslop
- Becky Baraclough
- Bruce Bailey
- Randy Collingwood

- barry rurribuii
- John Wade
- Mary-Ellen Pratt
- Ellen Brown
- Cristopher Ford
- James Bardin
- Joy Kenny
- Jocelyn Skaggs



## A Decade of Changes in OSINT and Online Investigations



By Norm Wilhelm

Head of Investigations, Toddington International Inc.

At a conference I presented at recently, one of the topics I discussed was how

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In nearly every respect, everything about the Internet and the World Wide Web has changed over the past ten years: the technology, the devices, the information, the websites, the tools, the cost, the rules, the demographics, and the way we use it. Most of these changes have not had a significant impact on research, investigation or intelligence processes, while other seemingly small changes have had a very great impact.

In the following paragraphs I have listed in chronological order what I think have been some of the most significant changes between 2008 and 2017:

- 1) Nov 2008 Knight v Barrett 2008 NBQB: Prior to this Canadian civil court case, many investigators disagreed on whether an investigator should show in their investigation report where they found their information. One side said you had to show where information was found to prove it was publicly gained and where it was posted; the other side said they didnt want to give away their sources or trade secrets. This court case (and others since then) did away with the entire argument by setting the standard that all must follow: all investigators must show where they found their online information, the most common method being by documenting the URL where the information was found.
- 2) Jan 2009 First Publicly Recognized Bitcoin Transaction: Bitcoin, and other e-currencies in general, were invented several years earlier, but this date signifies one of the first transactions that lent legitimacy to the Bitcoin as a valid method of payment. Ten years later, this e-currency that many in the past forecast as a waste of effort and a tool of criminals is now making a significant impact in the investment industry.
- **3) May 2009 Facebook Privacy Controls**: Many investigators complain about the expanding use of privacy controls on social networking accounts, but we should all remember that these same tools can be used to protect the privacy and security of law enforcement and security members, and their families.
- **4) Aug 2010 EXIF Data Incident**: At this time, a celebrity host from the TV show 'Mythbusters' posted a photo online of a car that he was selling. A thoughtful respondant informed the celebrity that his photo contained EXIF information on it, including camera information, the date, the time, and the

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11112 1	became a major i	fiews story, and although the celebrity laughed it on the	E
incide	nt as unimportar	nt, he moved soon after. The resulting public outcry fo	r
(more	) privacy of image	ery data led to most social websites removing the EXIF data	a

from any image uploaded to their accounts.

- **5) Oct 2010 Instagram Website Launched:** Since it was created, Instagram has become what I consider to be one of the top five social networking websites in the world, and currently the most popular website that focuses on uploaded imagery content, making it a go-to destination for any investigation process.
- **6) Apr 2011 iOS4 Location File Incident**: This listing related to Apple's 'cpnsolidate.db' file isn't about the file itself and its potential vulnerabilities; it is about the reaction that followed with the general public becoming increasingly aware of how location information on their devices can be used and the impact on their privacy. Over the past few years, it has been noticed that a significant percentage of people do not identify their location on their social networking accounts, which presents a challenge to investigators.
- 7) Sep 2011 Snapchat V2 App Released: Not the original version, but rather the improved second version, this mobile device app was embraced by hundreds of thousands of teenagers who wanted to prevent their parents from being able to see what they were posting to each other. It is not as popular as it was six years ago, but it is still in common use, as are many imitators and competitors.
- **8) Nov 2011 Opencorporates Launched:** Haven't heard of this site? It is one of my favourites for locating information about companies centric to North America and the United Kingdom, allowing you to search by company name and director name. Every result shows a link back to the source website, which can be one of nine Canadian provinces, over 40 American states, or 10 other offshore countries.
- **9) Nov 2012 Twitter Advanced Search**: This is one of those website evolutions that completely changed the ability to locate information on Twitter accounts (and coincidentally wiped out over 100 websites that profited from Twitter analytics). I would have voted this as the 'most amazing new tool for 2011', and it is still a

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- **10) May 2013 Google 3D Maps**: When Google 3D Maps finally came out I actually stood up out of my chair and yelled 'Yes!'. Being able to match images to ground locations combined with the ability to use the 3D map function makes for a powerful tool in locating places, events, objects, and people.
- 11) May 2013 Echosec/Geofeeedia Geolocation Websites: Combining social networking content with geolocation search capability, sites such as EchoSec (and in the past, the now defunct Geofeedia) can often offer real value to investigators. Geolocation services only work effectively when users are posting publicly with location services turned on, and as a result of some bad publicity in 2017, some social media platforms have severely restricted how their location data can be used. Still, geolocation search services can be a gold mine of information and I believe they still have great potential in the coming few years.
- **12) Mar 2014 123people.ca Disappears**: A people search engine that found excellent Canadian results, and one that I personally considered to be one of the better search tools out there.
- 13) May 2014 Google Spain v AEPD/Costeja: This is the court case that started the 'opt-out' movement. Type "right to be forgotten + wikipedia" into Google and you can read the whole story. As to the impact of this case, I'm divided on it; although it gives the subjects we investigate the ability to remove results from Google, it also allows persons with legitimate security concerns (i.e. law enforcement, security members, persons under threat, etc.) the ability to remove results from Google. You have to take the good with the bad.
- 14) Apr 2015 Iconosquare Goes Premium: A website that took Instagram account information and presented it in a different way, this website showed Instagram account images, comments, and 'likes' all on one single page that was easy to save. And, if the account holder had their location services left on, it showed where the image was uploaded from on its own mapping link. It might still do that, but I can't confirm if it does as the website is now a premium service. I have since shifted to a different website with less capability and no cost.

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- **15) Aug 2015 Ashley Madison Data Breach**: This data breach was not the first, or the most damaging to the security industry, but it was certainly the most well known. It pushed public sensitivity regarding the privacy of their personal information to a new high that had not been reached since 2011. It also boosted the privacy consulting sector of the security industry.
- **16) Aug 2015 Matchdeck Buys AIHIT**: This is another website that many investigators either do not know about or don't use. It is a great source of information regarding changes to domain registration, often showing changes in names and contact information going back years. The original buy–out wasn't the problem; it was when the new owners changed AIHIT to a premium service. You can still see up to six months of registration changes (sometimes even back one year) but you now have to pay to see the entire history of a domain. And when I say pay, I mean an estimated \$1300 per year for full access.
- 17) Oct 2016 Quanki Launched: Still unknown to many investigators, Quanki is a very useful people search engine that shows the current capabilities of what data scrapers can do with aggregated public information. Although focused on US residents, people with links to the US (i.e. residences and business operations) are likely to show up here.
- **18) Feb 2017 Omgili Search Engine Gone**: For the last five years, Omgili was one of the top three search engines for finding online content related to boards, forums, and blogs. And then it stopped working. It is unconfirmed whether they decided to quit, went out of business, or sold their data to another company, but its loss leaves us with fewer options for these types of searches (try <u>Boardreader</u> in its place).
- 19) Apr 2017 Facebook Login Search Change: Formerly one of the investigators' best kept little search tricks, Facebook made a significant change to this search capability earlier this year. When selected in the account privacy controls, Instead of showing whether a particular phone number or email address was used in relation to an active account, it now is most likely to send a notice to the an account holder that someone is trying to enter their account (or gain information about their account). I no longer recommend this as an open source search technique.

Once again, a relatively short time period has resulted in numerous changes to Internet websites that affect our methods, processes, and where we go for sources of information. These are only a few of the changes that have occurred, and are the ones I consider to have had the greatest effect on online investigations. These examples confirm that if you don't have time to do this research yourself, you need to network frequently with a group of associates, and get refresher training at least once a year, just to keep up with the changes that are always occurring online.

That's all for this issue. Hope to see some of you at a future conference, and you can <u>contact our office</u> if you want to learn more about open or in-house training, as well as the <u>regularly updated research resources</u> available on our website!

# A Decade of Changes in Open Source and Online Investigations



Serving as Head of Investigations at TII, Norman Wilhelm is a licensed private investigator with over 20 years of experience in open source intelligence and online investigations.

He is a highly decorated and accomplished former member of Canadian military intelligence, who later worked in the human resource management industry and then at one of Canada's largest private investigation companies, specializing in online investigations and research. The majority of his work over the past

nine years has supported workplace investigations, threat assessments, insurance fraud, class action suits, and family law. In November 2013, he was recognized by the Supreme Court of British Columbia as an expert in open source intelligence and online investigations.

His current work at Toddington International includes research on internet resources, curriculum development and instruction on the topic of online investigations, delivering courses to investigators working at private companies, corporate security units, regulatory agencies, provincial government departments and federal agencies.

## **Upcoming Select Worldwide Training Dates**



## "Advanced Internet Intelligence & Online Investigations" Canberra, Australia A Special 5-Day Comprehensive Training Program

February 19 - 23, 2018, Canberra ACT



"Cyberpsychology and Threat Intelligence: Assessing Risk Online" 1 and 2-Day Courses

With Forensic Psychiatrist Dr. Cynthia Baxter MD FRCPC DABPN

I CUIUAIY 20-21, 2010, TOTOTILO, ON (TWO DAYS)

March 12-13, Calgary, AB (Two Days)

A ground-breaking program that will provide the skills to collect and analyze social media content in order to assess the threat and risk of violent behaviour in a wide range of scenarios. Please note, seating is limited.



"Advanced Internet Intelligence & Online Investigations" Spring 2018 Series 3-Day Course

Early-bird pricing available for a limited time only

March 14–16, 2018, Vancouver, BC March 26–28, 2018, Toronto, ON

### SE Asia and Australia

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"Advanced Internet Intelligence & Online Investigations"
2-Day Course

March 20 - 21, 2018, Sydney, Australia

TII is pleased to offer a number of specialized and customizable in-house training programs for both the public and private sector in a variety of formats – we also have available a number of expert speakers available.

To learn more about what we can do to empower your workforce, contact us.

#### **Resources for the OSINT Professional**



<u>facebook.com/live/map</u> - Explore Facebook Live Map and search for live video streams by location.

<u>international affairs resources.com</u> – a frequently updated Internet directory of over 2000 annotated links to high-quality English-language resources for a wide range of international affairs, international relations, international studies, global studies, and global education topics.

rounder bendan elen mat promises to be raster by blocking ads and trackers that violate your privacy and cost you time and money".

<u>downforeveryoneorjustme.com</u> - Check to see if a web site is actually down or if your network just cannot connect to it.

<u>jelliesapp.com</u> - Safer YouTube alternative for kids.

<u>followthatpage.com</u> - A free service alerting users on changes to a targeted web page, limited to 20 daily checks and 1 hourly check per user (higher limit available with paid "Pro" version).

<u>amzar.com</u> - Free online file converter; convert videos, images, PDFs and other documents.

wdl.org - The World Digital Library (WDL) is a project of the U.S. Library of Congress, carried out with the support of the United Nations Educational, Cultural and Scientific Organization (UNESCO), and in cooperation with libraries, archives, museums, educational institutions, and international organizations from around the world.

humantraffickingsearch.org – Human Trafficking Search (HTS) is a global resource database on human trafficking for the purpose of educating and raising awareness of the issue. First developed in 2006, HTS has grown to manage thousands of multilingual sources from across the world.

worldaerodata.com - World Aeronautical Database

<u>newspapermap.com</u> - Find newspapers from around the world and sort by language via Google Maps

<u>freecarrierlookup.com</u> – Enter a phone number and this site returns the carrier name and whether the number is wireless or landline. Number portability aware, it works with ported phone numbers from most countries. Also returns the email-to-SMS and email-to-MMS gateway addresses for USA/Canadian phone numbers.

<u>oscobo.co.uk</u> – A search engine "created for the sole purpose of protecting your privacy while you search the web", it keeps searches private, does not collect personal information and does not run third-party scripts or tools.

familysearch.org - Guide to guessing a name variation: Twenty ways to find an

finding relatives, and searching the record without an index.

<u>Guide to Names and Naming Practices</u> – A guide produced in PDF format by the UK to aid with difficulties that are commonly encountered with names from around the globe. This guide may be useful when dealing with names from unfamiliar countries or regions.

<u>picsearch.com</u> - An image search service indexing more than 3,000,000,000 items

Want more? Visit our continually updated, FREE <u>online research resources page</u> featuring hundreds of links, cheat sheets, investigative guidelines, and more!

## **Comprehensive E-Learning Program:**

"Using the Internet as an Investigative Research Tool™"





Take your Online Research and Intelligence Skills to New

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The most comprehensive and up-to-date Internet research and investigation e-learning program available anywhere, <u>Using the Internet as an Investigative Research Tool</u> 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 classroom-based training, 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 well over eight thousand investigators and knowledge workers around the world.

Enrollment takes only a few moments; online credit card payments are accepted, group discounts and licensing options are available for five or more registrants. Visit the course page to find out more and instantly register, or contact us directly with any questions.

Bonus: Tuition fee includes a one-year subscription to the newly revised and updated TII Premium Resource Knowledge Base, a premium resource of some 4,000 deep web resources and sites (an additional \$299 value)!

As a federally certified educational institution in Canada, TII can provide Canadian students with a T2202A Tuition Tax Receipt.

## **More Online Training**

## Open Source Intelligence for Financial Investigators 40-Hour E-Learning Program

Essential for all financial institutions and corporations required to comply with the European Union Fourth Anti-Money Laundering (AML) Directive and similar legislation, or otherwise engaging in enhanced due diligence activities, this comprehensive training provides financial and business professionals with the latest tools and techniques required to effectively gather online OSINT, with the aim of enhancing compliance activities and minimizing potentially detrimental risks to an organization — both quickly and accurately. **Sign up or learn more** here.

# Introduction to Intelligence Analysis 40-Hour E-Learning Program

This program provides a rich and interesting opportunity to explore the key concepts and intellectual foundations which inform intelligence analysis activity. Students will develop awareness of, and experience in, using common tools and methodologies to conduct analysis assignments, as well as learn how to fashion one's insights and ideas in a way that communicates effectively to clients and other intelligence consumers. **Sign up or learn more** <a href="here">here</a>.

### Criminal Intelligence Analysis 40-Hour E-Learning Program

This program is designed to equip aspiring and inexperienced analysts, as well as other interested law enforcement and investigative professionals, with the knowledge and skills required to undertake criminal intelligence analysis work, and to understand criminal intelligence analysis products when encountered. **Sign up or learn more** <a href="here">here</a>.

### Strategic Intelligence Analysis 40-Hour E-Learning Program

This program is intended for professionals working in public sector enforcement, intelligence, national security, and regulatory compliance roles, or those aspiring to do so. Students will be equipped with the skills and knowledge required to effectively conceive, plan, and implement strategic analysis projects, and deliver impactful strategic advice to clients and other end users. **Sign up or learn more** here.

#### "How-Tos" and Articles of Interest for the OSINT Professional

How did Google, Facebook, Amazon and Apple come to infiltrate our lives so completely? Is Facebook a "media company" or a "platform"? <u>Answers to these and other questions from Clinical Professor of Marketing, Scott Galloway</u> (well worth the 20 minute view).

understand how human beings behave and why, especially in our socially mediated world.

<u>Security researchers have identified 44 trackers in more than 300 apps</u> for Google's Android smartphone operating system. The apps, collectively, have been downloaded billions of times (and many of these trackers will also exist on iOS).

"Project Maven" is using Artificial Intelligence to assist U.S. Special Operations Command intelligence analysts identify objects and threats in video transmitted from small drones. "Al is now hunting terrorists".

#### Why Artificial Intelligence is Not Like Your Brain - Yet

An excellent article by LT David Andre, USN, on the value of OSINT support in the bigger Intelligence picture: "Seeing the Forest Through the Trees – The Value of OSINT for the US Navy".

#### Neurotechnology, Elon Musk and the Goal of Human Enhancement

Visual search engines will be at the centre of the next phase of evolution for the search industry, with Pinterest, Google, and Bing all announcing major developments recently. Who looks best placed to offer the <u>best image search experience?</u>

An Open Source Mapping Startup Dies as online mapping industry gets hotter than ever.

Canadian government partnering with private sector in Artificial Intelligence trial that will attempt to <u>predict rises in regional suicide risk by monitoring social media posts</u>.

Silicon Valley firms <u>accused of ultimately not being accountable for the content on their platforms</u>, and of outsourcing social responsibility to journalists, watchdogs and other citizens, who have increasingly taken on the role of unpaid moderators.

Mark Zuckerberg's annual personal challenge for 2018 is to <u>fix systemic issues</u> with Facebook.

New machine learning method developed by researchers at the University of Helsinki, Aalto University and Waseda University of Tokyo can use <u>data on cell</u>

It starts with a phone app: "<u>How Hackers Use Hidden Data on Airline Boarding</u>
Passes to Hack Flights".

Twitter to begin enforcing new rules announced last month, to "reduce hateful and abusive content". The <u>ban includes violent threats and even "wishing for serious physical harm"</u>.

America invented the three-digit credit score. Now companies in China are taking the idea to the extreme, using big data to track and rank what you do—your purchases, your pastimes, your mistakes. "Inside China's Vast New Experiment in Social Ranking".

Next generation technology helps focus lethality on the target while limiting the risk of civilian casualties. But drone advances are also getting cheaper to copy, so non-state actors can now employ them as well, giving insurgents or terrorists an outsized advantage.

As more research suggests, "psychographic targeting" makes it possible to influence the actions of large groups of people on social media, do we need to start thinking about what kinds of safeguards should be put in place to regulate online advertising?

Researchers at Notre Dame University report 73% of posts on Reddit (4th most trafficked site in the US) are voted on by users that haven't actually clicked through to view the content being rated – <u>Most content posted to Reddit is voted</u> on more or less blindly.

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