

In this month's Online Research and Intelligence Newsletter, an Overview of Developments in Online Imagery Tools, a Simple Technique for finding users on Facebook, upcoming TII Training Events and some of the latest resources for the Online Research professional



Toddington International Inc.

Online Research and Intelligence Newsletter

NOVEMBER 2014 EDITION

IN THIS EDITION:

- [ARTICLE: "Overview and Developments in Online Imagery Tools"](#)
- [ARTICLE: "Do they have a Facebook Account? \(A Simple Way of Finding Out\)"](#)
- [UK POLICE TRAINING: 5-Day Internet Intelligence & Investigation Training Programme - Avon and Somerset Police January 2015](#)
- [CANADIAN TRAINING DATES - 3-Day Courses in Vancouver & Toronto](#)
- [SALE! 46% Discount Limited Time Offer on our Most Popular e-Learning Course](#)
- [USEFUL SITES AND RESEARCH RESOURCES for the Online Investigator](#)
- [NEWS OF INTEREST for the Internet Research Professional](#)

WELCOME TO THE NEWSLETTER

It's been a busy start to the Fall season here at TII as we put in place a new e-Learning platform and streamline our training offerings for the 2015 calendar year. We are excited that delegates attending our training conferences in the New Year will see a series of coordinated educational programs that integrate fully into our e-Learning offerings. We are also looking forward to announcing a compelling new range of specialized training programs that will focus on subject areas as digital privacy and security aimed at front line workers and senior executives alike.

UNIVERSITY OF CAMBRIDGE - September 2014



This Autumn's Internet Intelligence course held in conjunction with the [International Chamber of Commerce - Commercial Crime Services](#) at the University of Cambridge was another sold out success. Hosted at historic [Queens's College](#) and with private and public sector clients in attendance from the around the EU, Africa, the Caribbean and Australia, this bi-annual event provides delegates the opportunity to develop new skills, network and take in the sights of this historic centre of academic excellence.

The next Cambridge course runs late March 2015 - for details contact Annette Galloway of the ICC-CCS in London at agalloway@icc-ccs.org or +44 20 7423 6960.

Congratulations to our Latest e-Learning Graduates!

Congratulations to those who have completed the "[Using the Internet as an Investigative Research Tool](#)" e- Learning program this month including: Marcus Pettersson and Alexander Hedemyr of the Swedish Tax Agency (Skatteverket), Sophie Alexander, Penny Crossland of CH Business Research Ltd, and Samky Mak of Seneca College.

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

- **By Email:** contact@toddington.com
- **By Phone:** +1 604 468 9222 [UTC - 8 hrs]

UK Police Training: Avon and Somerset Police 5-Day Internet Intelligence and Investigation Training Programme

**Avon and Somerset
Constabulary**



January 12th - 16th, 2015

Social Media and Internet technologies are playing an increasingly critical role in proactive and reactive police operations at all levels. In recognition of this, Avon and Somerset Police and Toddington International have joined forces to form a training partnership that will provide essential online operational skills to frontline police investigators across the United Kingdom.

At their purpose built computer classrooms near Bristol, the Avon and Somerset Police Investigative and ICT Training Unit will facilitate this highly acclaimed and comprehensive 5-day internet intelligence and investigations training programme.

Utilizing a dynamic and continually updated curriculum, combined with real-world case studies and challenging exercises, the course is open to all police and related personnel and runs regularly throughout the year. Hundreds of officers and police staff have already successfully completed this course over the past decade.

Full details and a course brochure is available on [our website](#) - For more information and to book your place on the course [contact us](#).

Upcoming Canadian Training Dates (Vancouver and Toronto)



We are pleased to be presenting our Advanced 3-Day Internet Intelligence Training Workshops in Vancouver, February 10th - 12th, 2015 and in Toronto, March 9th - 11th, 2015.

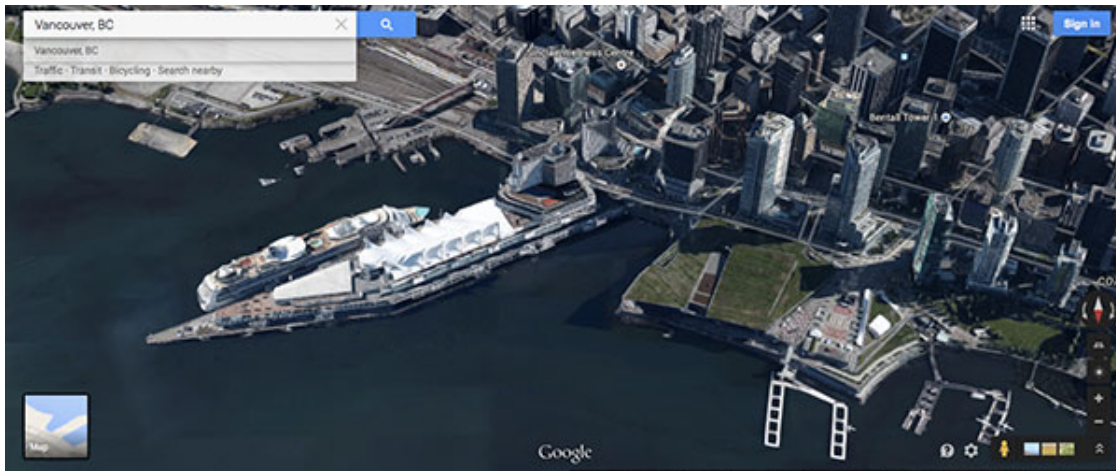
With a diverse group of delegates already signed up, these conferences will again be great networking opportunities in addition to providing attendees with highly valuable skills. Registration fees include a one year subscription to the [TII Premium Resource Knowledge Base](#) (a \$299 value) and a one year membership with the Open Source Intelligence and Research Association (OSIRA)

Early Bird Discounts of up to 25% are available!

For full details, conference brochure and sign up visit either the [Vancouver](#) or [Toronto](#) conference web sites or [contact us](#) anytime.

Overview Of Developments In Online Imagery Tools

*By Norm Wilhelm, Associate,
Toddington International Inc.*



Google Earth's 3D viewing capability as available through [Google Maps](#)

Keeping track of technological advancements related to imagery remains a high priority for online professionals in the law enforcement, private security and intelligence industries. There are no reliable numbers for just how many images and videos there are online, but rough estimates from a variety of sources point towards over two trillion images and five hundred billion videos. That's a lot of imagery, and a lot of potential information and evidence for researchers and investigators.

Another reason for this level of interest is the continued high level of public awareness regarding how images can be detrimental to claims and court cases. Over the last few years this has resulted in personal photos becoming scarcer to

come by as many people increase their privacy settings and block access to those particular photos that interest researchers and investigators. This in turn makes it even more important to glean every scrap of information from the limited materials being found online during research, analysis and investigations.

The use of imagery remains an important tool in locating and successfully identifying people and places. And it is often the only tool that will allow success. The ability to derive information from what is in the background of the image is often just as important. When interpreted correctly, what is in the background can help identify a person, a location, an event, and sometimes even the date (or at least a specific time frame). Bearing these points in mind, here are a few advancements of significance over the past year related to imagery interpretation, intelligence, and investigation.

- Prior to August 2010, many personal photographs posted to the Internet carried EXIF technical data that identified a wealth of information about the image itself, including where and when it was taken. Since then it has become very rare to find photos still carrying this information, causing researchers and investigators to look for other methods of obtaining data from these images.
- Google Maps remains the best online mapping service application for both desktop and mobile devices. The overhead imagery provided is still of higher quality than all other competitors. The addition of Google Street View in 2007 gave researchers, analysts and investigators an excellent tool for determining what was at a specific place on the map. This imagery can occasionally even provide license plate numbers and the faces of people despite the best efforts of Google staff to pixelize this information. The product was improved with Aerial View in 2009, and importing 3D buildings from Google Earth in 2013. This month Google expanded their Google Maps Gallery allowing users to import their own custom maps into the searchable Google database.
- Many images nowadays do not identify where or when they were taken. In these cases 3D buildings on Google Maps can be a powerful tool in confirming a more exact location. As an example, a recent test was able to locate the house of a celebrity living in Chicago, Illinois, by using two photos: a view of the apartment from the street level (which lacked any address numbers or names), and a photo taken from the rooftop terrace of the apartment overlooking the city. Use of the 3D view allows you to view the city from a point 50-100 meters above ground level. It was then possible to match three background objects in the terrace image with 3D objects on the map and triangulate a probable position. You can then drop

down to Street View level and look for a matching street level image for the apartment building within 100 meters of the triangulation point. This method subsequently determined the address and street name for the building. Even if you have never been to Chicago before, a trained user could complete this task in less than fifteen minutes. A total of twelve major cities in Canada have been turned into 3D maps so far, showing geographic features and city objects like buildings, trees, and infrastructure. A look at Google Earth shows that other cities across Canada are in the process of undergoing 3D enhancement but the process has been slowed by changes in the technology being used.

- Another useful tool on Google Maps that many users are unaware of is the sliding time scale for Street View images. After dropping into Street View, the information box at the upper left of your window shows the address, city and the date of the image you are looking at. A left-click of the mouse on this 'date' line provides a secondary drop-down box showing all the available imagery for this address. In one example from 18 Avenue NW in Calgary, AB, you are able to retrieve images of the same address dated Sep 2007, May 2009, Apr 2012, Jun 2012, Jul 2012, and Aug 2012. You can also look at the same house from different angles on the same street, from adjoining streets, and from distant streets, or across empty lots, all of which have their time scales and history of images. In summary, you no longer have one or two images of a location, but dozens of images of the same location to look at. This increases the likelihood of finding new and significant information about that location and its occupants.
- Google Maps closest competitor is Bing Maps, launched by Microsoft in December 2010. This mapping service application does not provide the same level of detailed satellite imagery as their competitor, but does provide a unique set of imagery called Birds Eye. Instead of 3D buildings, Birds Eye is a series of images of the ground shot by aircraft at an angle of 45 degrees to the ground at all four cardinal compass points. This allows for highly detailed views of structures and areas from multiple directions and at different times. Bing continues to update this program with new aerial information. The images provided are not duplicates of the Google Map information, thus offering the potential for additional images of locations that can be reviewed for information.
- Google Images and TinEye are assessed as the leading websites when searching for images themselves. Uploading an image or dropping an image into either of these programs provides both matching and similar results. Testing indicates that each program has its own advantages; TinEye gives 'more exact' matches, while the Google Images program allows

for finding cached files of images that may have been recently moved or deleted.

- Facial recognition programs have increased in number and effectiveness, but face significant issues. Many opponents to facial recognition cite public privacy and past misuse of technology. The program with the most positive reviews at this time is Nametag (developed by FacialNetwork.com). The beta for Nametag was released for the Google Glass products earlier this year. The application scans a stranger's face and then compares it with a database that includes pictures from social networking websites, dating websites and sex offender databases. The application can also lead to emotion recognition programs, and the coming year will likely see similar programs released on other desktop and mobile devices. Currently only a portion of the facial recognition database is available on desktop, and can be tested at Creepshield.com using the same image dropping method as used for Google Images and TinEye. In an unusual development, the recognition programs have been adapted in California for lost pets last month.
- Search programs that recognize objects within photographs have also advanced over the past year. Earlier this month a Google research team won a competition for the detection of objects in digital images. The advancement allowed location and labelling of multiple objects in one image and was also able to identify objects within objects, and objects overlapping objects. As this technology continues to improve, searching for matching objects within images will be a new tool for researchers and investigators in the near future.

The greatest fear that any online researcher or investigator has is that their methods and techniques will become outdated. Information sources disappear, access to information gets blocked by administrative changes, new technology develops that we find too hard to learn, or other types of information gets blocked by new laws or public perceptions about privacy. However, the examples provided show that with every lost avenue, another potential source of information is created. With billions of images and videos in circulation every day, the use of imagery will remain an important source of information for researchers and investigators. Keeping abreast of technological advancements and tools will remain a high priority for online professionals in the law enforcement, private security and intelligence industries.



e-Learning: 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

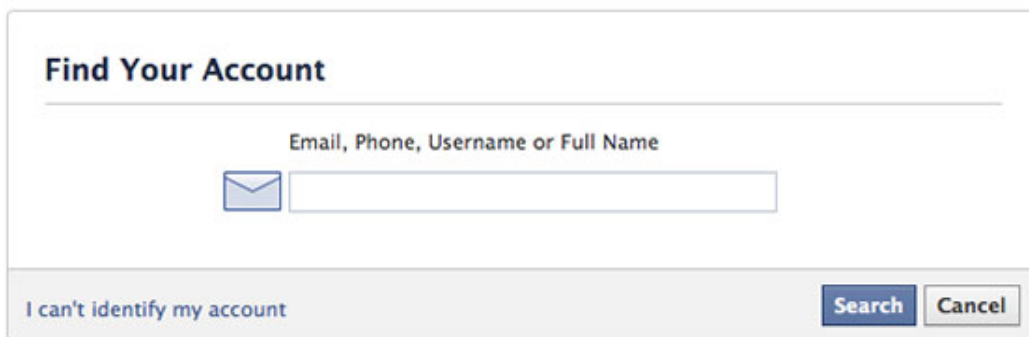
Limited Time Discount!
Regular Price \$750 - *available right now for just \$399*

SIGN UP NOW MORE INFORMATION

[Contact us](#) to learn more about group discounts and licensing options for private and public sector organizations.

Finding Unknown Facebook and Twitter Accounts Using Known Email Addresses and Mobile Phone Numbers

*By Allan Rush, Network Investigator
Dyfed-Powys Police*



I expect most investigators have searched for email addresses and mobile numbers within Facebook and Twitter in a hope to find an associated account. But what about the times when it returns a negative result?

Does it mean that there isn't an account linked with the email or mobile number, or that the user has made good use of their security settings to stop them from being traced in this manner?

In this situation I suggest it's time to forget your password... well at least

navigate to that section on Facebook or Twitter anyway

If you navigate to the “forgotten your password” section (no need to sign in) of these two social media giants you can enter an email address or mobile phone number here to ascertain if it is linked with a profile.

When entering either a mobile number or email address here

<https://www.facebook.com/login/identify?ctx=recover> on Facebook the result can tell you one of three things:

Nothing- It may return a negative so we assume that the number or email is not linked with any known Facebook profile / account.

Secondly it may return a positive result that includes the profile name (and often the profile picture) along with any other associated details. Additional associated details such as further email addresses or mobile numbers (depending on what was originally searched) will be displayed in partial form such as **a*****h@hotmail.com** or occasionally **a*****h@h*****.com** or for a number like **+*****09** (I'll get back to these in a little while).

Thirdly it may return a result where the profile name is not revealed but instead the email address or mobile number that was searched is repeated under a generic blue profile image. This may also include any other associated details displayed in partial form like **+*****09**. This is often how a result will be displayed if the email address or mobile number returned a negative result within Facebook itself

Although this last response doesn't identify an actual account to research, it does at least positively confirm that the email address or mobile number you searched is positively linked with a Facebook profile. It may also provide further investigative opportunities (keep reading) and should ensure any application to Facebook for subscriber details is going to reveal something worthwhile.

For your peace of mind searching for email addresses and mobile numbers in the “forgotten your password box” on Facebook and clicking search does not notify the user of the account of your activity (just don't click “continue” after the result is returned).

Staying with Facebook we can use the forgotten your password section even more to our advantage.

How about searching here with the known username of your subject? Entering the vanity name or ID number for the Facebook profile will return a result where the

profile is identified (often with the profile picture) along with any associated details (such as email addresses and mobile numbers) partially displayed as mentioned previously.

Back to those partial email addresses like **a*****h@hotmail.com**, testing has revealed that each asterisk displayed in the email addresses displayed indicates a missing character. This allows us to have a guess at the subjects email address. Now some are easier than others but they give us a big clue with the beginning and end of the email username and since most people use very traditional formats i.e. **allanrush@hotmail.com** the address can sometimes be worked out (I have had quite a bit of success with this). Without teaching anyone to suck eggs, consider nicknames used by the subject, dates of birth etc... and bear in mind addresses often containing full stops and underscores.

If you think you might have worked out the email address try entering your concoction back into the “forgot your password” section to see if it returns a result. Clues here that you have the right email address include the result returning the user name you were looking for, or if the profile previously returned additional partial details (obscured with asterisks) then do these match the ones previously displayed?

Now to Twitter; this works slightly differently than Facebook and will only confirm if a mobile number or email address is positively linked to a Twitter account, but that can still be useful intelligence. Navigate to https://twitter.com/account/resend_password

However in the “forgot your password” section on Twitter there is one big difference than with the Facebook method. After entering an email address or mobile number do not press return or click submit! Instead just wait a few seconds after entering your search details and a message will be displayed either saying “looks good” or “email or phone is invalid” hitting return will send a notification to the account holder!



USEFUL SITES AND RESEARCH RESOURCES for Online Investigators

- <http://trendsmap.com/> - Real-time trends, searchable by location or search

term

- <https://www.virustotal.com/> - Analyzes files and URLs for viruses and other malware
- <http://www.tineye.com/> - Reverse image search (by file upload or URL)
- <http://www.social-searcher.com/> - Real-time social media search engine (Facebook, Twitter, Google+)
- <http://www.google.com/trends/> - What's trending on Google now?
- <http://www.twipho.net/> - Twitter image search
- <http://yossarianlives.com/home> - Creativity-oriented search engine
- <http://redz.com/home> - Visual search engine for searching web content, images and videos
- <http://www.hashtagr.co/> - Hashtag search engine, with real-time results
- <http://securityalert.knowem.com/> - Check to see if your Gmail Account was hacked
- <http://www.sciencebite.com/> - Meta search engine for scientific queries (currently in beta)
- <http://whotalking.com/> - Social media search engine, searchable in any language, providing real-time results from multiple platforms
- <http://findgram.com/> - Instagram search tool, searchable by keyword (tag) or user
- <http://www.picturegr.am/> - Instagram image search engine
- <https://ydray.com/> - Easy alternative to sending files up to 5 GB without using email
- <http://www.currentlydown.com/> - Check if a website is currently down
- <http://www.ifussss.com/> (If You See Something, Share Something) - Browse uploaded, geo-, time-, and hash-tagged videos
- <http://smallseotools.com/backlink-checker/> - Backlink Checker: Find all the links that link back to a particular website
- <http://smallseotools.com/plagiarism-checker/> - Plagiarism Checker: Check if text content is unique
- <https://www.qwant.com/> - Search utility for web, social and media content
- <http://izik.com/> - Image-rich search engine that displays results by category (i.e., news, images, videos, etc.)
- <http://www.newswhip.com/> - Real-time trending news site
- <http://bearpanther.com/instamap/> - Instagram map, search by tags or location
- <http://www.page2images.com/> - Website screenshot generator
- <http://www.cachedpages.com/> - Access cached webpages
- <http://www.amnestyusa.org/citizenevidence/> - YouTube meta data extractor

NEWS OF INTEREST

for the Internet Research Professional

- "This Algorithm Predicts A Neighborhood's Crime Rate Using Google Street View" <http://goo.gl/vqZBeO>
- List of 20 Alternative Windows Browsers <http://goo.gl/VPP73p>
- "Healthcare Big Data Debate: Public Good Vs. Privacy" <http://goo.gl/gvx nha>
- "Ex-MI6 chief warns parents over apps that track children" <http://goo.gl/OWE8Ko>
- Must know search operators for advanced Twitter searches <http://goo.gl/0FCt6T>
- "Your medical record is worth more to hackers than your credit card" <http://goo.gl/5qqg7l>
- "Analyzing Trends in the Silk Road 2.0" <http://goo.gl/uCfyn5>
- "The Marketer's Guide to Facebook Graph Search" <http://goo.gl/IVHDn9>
- Helpful chart of educational web tools <http://goo.gl/gNrDmg>
- LinkedIn Demographics <http://goo.gl/VpmB7T>
- "5 Common iOS 8 Complaints and How to Fix Them" <http://goo.gl/vroms7>
- "Millennials Don't Care About Mobile Security, and Here's What to Do About It" <http://goo.gl/An4pwu>
- TrueCrypt lives on with a new name <http://goo.gl/Kn1kkl>
- "Could DuckDuckGo Overtake Bing?" <http://goo.gl/TYbx1U>
- "The Dark Web Gets Darker With Rise of the 'Evolution' Drug Market" <http://goo.gl/nh81Ks>
- For iPhone & iPad users: "Seven privacy settings you should change immediately in iOS 8" <http://goo.gl/AFMDNk>
- Jack Smith IV writes: "Stop Calling Tor 'The Web Browser For Criminals'" <http://goo.gl/QaOxGo>
- "Fundamentals of cloud security" <http://goo.gl/u11yrX>
- "How Online Black Markets Have Evolved Since Silk Road's Downfall" <http://goo.gl/8bQZWP>
- "What Hackers Find Out About You When They Get Into iCloud Is Terrifying" <http://goo.gl/erjQeO>
- "Passwords For 5 Million Google Accounts Leaked" <http://goo.gl/oGFZqE>
- Video: "Cybersecurity 101" <http://goo.gl/rXV8a1>
- "Social Media and the Law: Why Criminals Share Online" <http://goo.gl/g54Fp3>
- How Silk Road servers were seized <http://goo.gl/dl3QKK>
- "Global Internet Usage By The Numbers" <http://goo.gl/Syljm2>
- "Three Essential Steps to Make Yourself More Hack-Proof" <http://goo.gl/1QukBz>
- Useful list of academic databases and search engines <http://goo.gl/CEhD4g>

- “Tor: Explaining the network that makes web use anonymous” <http://goo.gl/ng6GZB>
- It's this simple to for hackers to get into your Apple iCloud account <http://goo.gl/K3OSFH>
- “The Open Source Tool That Lets You Send Encrypted Emails to Anyone” <http://goo.gl/nGKhEJ>
- Avoid damaging data leaks: Manage your own cloud security with these 3 useful tips <http://goo.gl/cpOKOk>
- “Surveillance Companies Are Secretly Selling Tech That Tracks Your Phone's Location” <http://goo.gl/7kn1dV>
- “Location Tracking: 6 Social App Settings To Check” <http://goo.gl/DRshbo>
- “Social media expert cautions users to think before they leap” <http://goo.gl/A9iTcz>
- "Social Media Can Help in Legal Search" <http://goo.gl/InUW0T>
- Craigslist search tips <http://goo.gl/W0zdd9>
- Advanced Google Search Functions <http://goo.gl/djXvni>
- “Use This Trick To See A Map Of Everywhere Google Knows You've Been” <http://goo.gl/SrNLMD>
- "How to securely overwrite deleted files with a built-in Windows tool" <http://goo.gl/WxcxDO>
- "The guide to password security (and why you should care)" <http://goo.gl/CYqUyo>
- Behind the Mask: “The Weird Reasons Why People Make Up False Identities on the Internet” <http://goo.gl/fH3aJp>
- "Unusual and Useful Twitter Search and Filtering Techniques" <http://goo.gl/SSUTqH>
- John McCarthy reports: "Selfie-addicted Russian soldier caught in Ukrainian territory by Instagram geo-tagging" <http://goo.gl/LKjw70>
- "Hackers Can Control Your Phone Using a Tool That's Already Built Into It" <http://goo.gl/ZS8pX5>

[follow on Twitter](#) | [friend on Facebook](#) | [forward to a friend](#)

Copyright © 2014 Toddington International, All rights reserved.

[unsubscribe from this list](#) | [update subscription preferences](#)