Toonari: Discovery & Preservation Services

We identify, preserve, obtain, analyze and ultimately illustrate electronic evidence for a wide range of clients.

1. Social Media Discovery & Web Collection
2. Court Admissible Evidence Authentication
3. Discovery of Historic Website Activity, Design, Content and Messaging
4. Digital advertising and web analytics audit & preservation
5. Trial Research & Jury Monitoring Services
6. Expert Testimony & Consultation
Toonari: Training & Education

We provide seminars for law firms, corporations, federal and state government agencies, and courts worldwide.

1. Social Media Investigation & Intelligence
2. Online Media Forensics & Evidence Authentication
3. Online Investigation Techniques
4. Covert Account & Persona Creation (Undercover Investigation, Witness Protection)
5. Conceal Individuals from the Internet (Erasing Online Footprint of an Individual)
6. Darknet & Deep Web
7. CDR Analyses (R and other applications)

Collaboration & Partnerships:
1. Stetson – Upcoming CLE in May
2. SPC
3. SPC Corporate
4. SPC Allstate (Law Enforcement & Forensics)
5. Currently establishing additional partnerships with Universities in the UK
New Tech: **Tomoko Discovery** (June 2016)

Tomoko, Self Service Online platform for the preservation of Court Admissible Evidence from online sources.

1. Cloud-based SaaS platform – Web Browser based, simplified Deployment and lets you work from anywhere.
2. Court Admissible Evidence Preservation of Online Content - Metadata Collection and Digital Signature that complies with the E-Sign Act, Federal Rules of Evidence, FINRA and SEC Requirements.
3. White Label Case Reports - Create Insightful Reports Easily.
4. Evidence Storage - Choice between cloud storage and direct export.
5. Search, print, organize, share, tag and present.
6. Parzival Query Engine - Helps you to find information on Social Media and the Web.
7. Optional Screen Video Recording - Add a second layer of Evidence Preservation if needed.
8. Monthly Subscription – Cancel Anytime, No Annual Contract.
9. APIs that allow other software programs like eDiscovery applications to interact and integrate with Tomoko.

**Pre-Register:** [www.Tomoko.Tech](http://www.Tomoko.Tech)
Agenda:

01 Social Media
02 Facebook
03 Twitter
04 Preservation
Information: **Unstructured Data**

- Approx. 40% of the world population has an internet connection
  - 3,318,229,525 Internet users in the world (March 1, 2016)

- Annual global IP traffic will pass the zettabyte (1000 exabytes) threshold by the end of 2016, and will reach 2 zettabytes per year by 2019.

- In 2016, global IP traffic will reach 1.1 zettabytes per year, or 88.4 exabytes (nearly one billion gigabytes) per month, and by 2019, global IP traffic will reach 2.0 zettabytes per year, or 168 exabytes per month.

- User generated content like tweets, posts, instagrams, etc. are considered unstructured data.

- Google’s Project Loon is a network of balloons traveling on the edge of space, designed to connect people in rural and remote areas.

- As part of our Internet.org efforts to connect the world, Facebook is partnering with Eutelsat to launch a satellite this year into orbit that will connect millions of people.
Social Media Statistics: Quick Facts

January 2016 Top-10 Global Monthly User Stats

- Facebook (FB) 1,550 million
- WhatsApp (FB) 900 million
- QQ 860 million
- Facebook M.(FB) 800 million
- QZone 653 million
- WeChat 650 million
- Tumblr 555 million
- Instagram (FB) 400 million
- Twitter 320 million
- Baidu Tieba 300 million
Social Media Statistics: Law Enforcement

Survey: LexisNexis

- Most investigators using Facebook and YouTube for their investigation
- 33% don’t have enough knowledge to use it
- More than 60% believe Social Media helps solve crime more quickly
An online social networking service launched on February 4, 2004, by Mark Zuckerberg, and co-founders Dustin Moskovitz, Chris Hughes and Eduardo Saverin. It is increasingly being used by school administrations and law enforcement agencies as a source of evidence against users.

- **2015 / Homebuilder** - The use of unauthorized Architectural House Plans was found on YouTube, LinkedIn, Facebook and Twitter.
  - The homebuilder deleted the Architectural House Plans 5 years ago from his website.
  - Toonari identified the deleted webpages dating 5 years back on Web Archives showing the unauthorized use of the Architectural House Plans.
- **2015 / Insurance** - The individual claimed that he can stand only for short periods of time and will not be able to work again.
  - The individual discontinued all use of Social Media and deleted all of his accounts.
  - Toonari identified posting and images on a Facebook Group for runners.
- **2016 / Insurance** – Individual claimed injury due to being rear-ended in parking lot accident.
  - The individual claimed physical injury and loss of marital relations.
  - Toonari identified individual on Facebook swimming, and enough comments to determine marital separation occurred before lawsuit.
Facebook: Quick Facts

Q4 2015 Statistics

- Over 1.5 billion users
- 1.04 billion daily active users on average for December 2015
- 934 million mobile daily active users on average for December 2015
- 1.59 billion monthly active users as of December 31, 2015
- 1.44 billion mobile monthly active users as of December 31, 2015
- Approximately 83.6% of Facebook's daily active users are outside the US and Canada
- Time spent on Facebook per user per day: 20+ minutes
- Percentage of parents that are friends with their teenager on Facebook: 83%
- Percentage of drivers that admit to checking Facebook while operating their vehicle: 27%
- Daily active users in Canada and the USA: 167 million
- Age 25-34 are 29.7% of users, the most common demographic
Facebook: Privacy

Facts:

- Facebook users tend to keep information a little more secure than users of all other social media networking sites.
- By default, a new Facebook user must specify the privacy settings to their account during that creation of their profile.

Why?

- This is caused by privacy complaints of users and competitors that continuously protest against Facebook’s privacy policies. Many of these user settings simply do not promote privacy and leave the users information exposed for anyone to see.
Facebook: Basic Searching

To search for something, click the search bar at the top of any page on Facebook, enter what you're looking for and choose from the results. When typing something, you may see suggestions for what you're looking for. If you see what you're looking for in these suggestions, click it to save time searching.

Search Bar Result Categories:
- Top
- Latest
- People
- Photos
- Videos
- Pages
- Places Groups
- Apps
- Events
Facebook: Search Techniques

Timeline

- The Timeline provides a chronological list of all posts made
- Scrolling all the way down and clicking ‘show older stories’ will reveal posts from a greater time period
- If a user changes his or her privacy settings it will only apply to posts made after the change
- Change “Highlights” in gray next to the month and year on the Timeline to “Show All” in order to reveal all of the public content from older posts.

About

- This section will include the general information about an individual such as contact information, city of residence, workplace, etc.
- Be sure to click on all tabs on the left, look at more than the overview
Facebook: Search Techniques

Photo
- Be sure to browse through the photos and the comments for valuable information

Friends
- You can browse through the friends of a user
- You can also see friends who have been recently added

Edited Comments
- If a comment has been edited the word ‘Edited’ will appear next to it
- Clicking on ‘Edited’ will load a new window that displays the edits

Search by email address
- Cannot type an email directly into a search to find someone
- Instead put it in the address bar:
  http://www.facebook.com/search/results.php?q=EMAILADDRESS
Facebook: Subject ID

The following queries will help you to identify a Facebook account (Username/User Name URL) by using the email or cell phone number of your target. After you identify the account you need to get the User ID. The Username can be changed easily and changes the account URL as well. However the User ID does not change and will stay with the account. Therefore you can always find the account again by collecting the User ID. The User ID is also needed to subpoena information from Facebook.

Search Subject ID:
- Account by Email
- Account by Cell Phone
- Username to User Number

Remember: Always record the User ID.
Facebook: Videos

In this case the queries will show you any video of and by the user including likes and comments.

Videos:
- Videos Of User
- Videos By User
- Videos Liked
- Video Comments
- Videos
Facebook: Photos

Photos are highly important during your investigation. The search strings that we have identified for you will help you to find pictures of the user and images the subject has been tagged on by somebody else. In addition it will show you the photos the user liked and comments on the images itself.

Photos:
- Photos By User
- Photos Liked
- Photos Of Tagged
- Photo Comments
Facebook: Places & Apps

The identification of places that your target visited or currently is visiting can be vital during any investigation. In addition your findings can be used for surveillance purposes.

Identifying apps that are being used by your target can lead to additional data. The Nike+ Running app for example offers elevation tracking, integration with the Health app in iOS 8, a GPS map with location and course showing in addition how fast or slow they are ran at a particular time. The accuracy of the GPS map will depend on the smartphone’s signal throughout the run, but users have the option to calibrate every route following a run, to ensure the statistics reflect the accurate distance covered.

Places:
- Recent Places Visited
- Places Checked-In
- Places Liked
- Pages Liked

Apps:
- Apps Used
Some of the most helpful queries will show you a connection between two individuals. This can range from common groups to common events.

Multiple People Profiles (Connection between 2 People):
- Common Friends
- Length of Friendship
- Common Places
- Common Check-Ins
- Common Likes
- Photo Tags
- Common Photo Likes
- Common Photo Comments
- Common Video Comments
- Common Events
- Common Post Comments
- Common Groups
Facebook: Events

The “event invitation” and “event attended” queries will show you the event invitation and the actual event that the person attended. The event page itself will show you the people who have been invited, the people who went and the people who are interested in going.

Events:
- Event Invitations
- Events Attended
Facebook: Posts

Not finding the posts you are looking for? We got you covered with the “post by user”, “post comments” and “posts tagged on” queries.

Posts:
- Posts by User
- Post Comments
- Posts Tagged
Twitter: Overview

- A microblogging social network founded in 2006 by Jack Dorsey and Biz Stone

- Members can post "tweets" of up to 140 characters directing them to specific people via the @ symbol, linking them to specific topics with the # symbol, or releasing them to the world at large
  - Direct messages are also available but these are not open to the public nor searchable by anyone other than the user

- Tweets are publicly visible by default, although tweets can be restricted
Twitter: Quick Facts

- As of September 2013, 1 billion registered users (284 million active users) send 500 million tweets every day.
- Fewer than half of tweets were posted using the Twitter.com interface, third-party applications used most.
- 80% of active users access Twitter using mobile device.
- Twitter's percentage of total global social media sharing is 30%, 24% in North America, 45% in Europe.
- 56% of Twitter users use it to document their lives in real time.
- 1 in 7 tweets contain at least one curse word.
- 10,000 tweets per day contain racial slurs.
- In January 2012 in New York, police arrested 43 gang members linked to killings, shootings, and robberies because of posts members put on Twitter.
- Former NFL player home broken into by partying teens who caused $20,000 in damage. Arrests made based on photos teens posted of their actions on Twitter.

(Source: Digital Market Ramblings)
Twitter: Partnerships

Google: Partnership relaunched with Twitter started on May 19, 2015
Relevant mobile queries produce real-time content from Twitter in addition to traditional Google results. Search queries will no display recent tweets by or about the subject you searched for. In addition user can now execute hashtag searches through Google. Use the custom link below to conduct a Twitter specific search:
https://cse.google.com/cse/home?cx=004053080137224009376:icdh3tsqkzy

Bing: Partnership dating back to 2009
New updates, due to Twitter partnership, makes it much easier to look up people and find tweets. Search results based on variety of factors such as popularity, retweets, and account status. Bing will make suggestions or alternatives as you type in search bar. Twitter data is now utilized in Bings Pay Per Click Advertising program.

Yahoo: Powered by Bing
All Yahoo results are coming from Bing, after launching unsuccessful multiple redesigns of their search engine. Yahoo is currently shutting down other services like maps as well but its Keyword searches will return recent tweets if applicable due to the Bing Partnership.
Twitter: Basic Search

Examples:

- Include: termA OR/AND termB  
  Conan OR/AND Leno

- Exclude: termA–termB  
  Conan–Leno

- Tweets From:  
  from:Conan

- Tweets To:  
  to:Conan

- Date Search  
  iPhone since:2014-09-01 until:2014-09-20

- Tweets with links  
  amazing filter:links
Twitter: Advanced Search
**Twitter: Location Searches**

Location feature has to be turned on in mobile device
- Clicking on location will give time of post and Google Map position at time of posting

Twitter advanced search can search location if investigating an incident at a known location
- Put geocode: GPS coordinates, search radius
- Can also add search parameter such as the word “fire”

Tweetpaths (tweetpaths.com)
- Must know username
- Will show locations of tweets for user w/GPS enabled
- Can identify several users on the same map

Ready or Not (app.teachingprivacy.com)
- Uses social-media post to find an individual in the physical world
- Uses GPS data attached to Twitter and Instagram posts to create a map
Twitter: Location Searches

MapD MIT (http://mapd.csail.mit.edu/desktop)
MapD Harvard (http://worldmap.harvard.edu/tweetmap)
  - Historical database of tweets displayed on a map
  - 2009-2013

One Million Tweet Map (onemilliontweetmap.com)
  - Live stream of most recent tweets from a location

GeoSocial Footprint (geosocialfootprint.com)
  - Combines location information to form “Location Footprint”
  - Can be used to identify areas of concern
**Twitter: Tweet Search**

**All My Tweets (allmytweets.net)**
- Presents ALL of an active user’s tweets together
- Can search for terms in tweets

**Conweets (conweets.com)**
- Find what two people have been tweeting to each other

**First-Tweet (discovertwitter.com/first-tweet)**
- Find anyone’s first Tweet
Twitter: Relationship Investigating

Twiangulate (twiangulate.com)
- Displays mutual friends of two Twitter profiles

Mention Map (mentionmap.com)
- Displays a visual map with Twitter user’s connections
- Thickness of lines depict strength of relationship
Twitter: Miscellaneous Resources

Backtweets (backtweets.com)
- Can identify posts that link to a specific website
- Good for finding people promoting an illegal website

FollerMe (foller.me)
- Analytical look at a user's profile and latest tweets
- Looks at user topics, join dates, and follower ratio
THANK YOU

Need help? Please contact us.