



SOCIAL MEDIA: Investigating in the Age of GeoSocial Data



METHODOLOGY



- BACKGROUND CHECK
- CONTENT COLLECTION
- PRESERVATION
- ANALYSIS
- AUTHENTICATION (METADATA)
- MONITORING
- TESTIMONY

PEOPLE

JUSTIN SMITH







INVESTIGATING PEOPLE

CASE STUDY 1: "BIKER GRANDMA"

- A 50 year old paper mill worker claimed a worker's compensation injury due to an alleged **overuse of her right arm**.
- The Self Proclaimed "biker grandma" was found to be **bragging about her injury along with her active lifestyle on Facebook**.
- A Vimeo account was located via an email address which had **168 helmet cam videos** posted by the claimant over a period of two years. This included periods of time **prior to and after the date of loss**.

Issues to Consider: Identity Resolution & Capture v. Post Date



COMMON IDENTITY RESOLUTION MATCHES

- FULL NAME
- GEOGRAPHIC INDICATORS
- EMAIL ADDRESS
- FRIENDS WITH CONFIRMED RELATIVES
- CITY OF RESIDENCE
- KNOWN HANDLE
- SELF-REFERENCE
- DATE OF BIRTH
- PHOTOGRAPHIC



CAPTURE DATE v. POST DATE

QUANDARY
The date or photo that is posted is not necessarily the date it was captured. This potential discrepancy may be highlighted by an astute attorney during litigation.

RESPONSE
Utilize comment threads to verify the actual capture date.
"We had sooo much fun at your birthday party yesterday!!"

Use surrounding geosocial data to place photo in context, or simply use clues from the photo.
Signs, banners, event names, etc. in the photo with time and date specificity

Ask for the plaintiff/claimant to produce the content in its native format in order to backup their assertion that the dates are different.

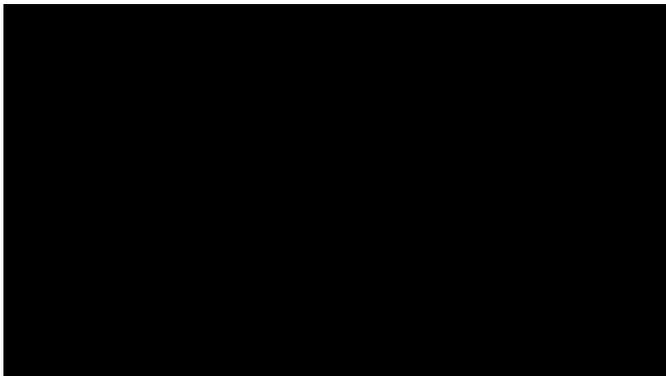
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CASE STUDY 2: TRIATHELETE

- 47 year old male who allegedly injured his leg, knee, wrist and back was the subject of the SocialPro investigation.
- Activity was easily located on Facebook and also a YouTube video created by his wife.

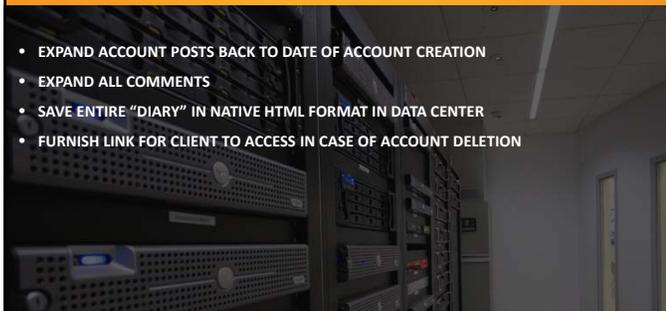
Issues to Consider: Account Preservation & Private Accounts





ACCOUNT PRESERVATION

- EXPAND ACCOUNT POSTS BACK TO DATE OF ACCOUNT CREATION
- EXPAND ALL COMMENTS
- SAVE ENTIRE "DIARY" IN NATIVE HTML FORMAT IN DATA CENTER
- FURNISH LINK FOR CLIENT TO ACCESS IN CASE OF ACCOUNT DELETION



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CASE STUDY 3: STREET FIGHTER

- 25 year old male who claimed a right heel injury.
- Instagram content revealed links to websites containing videos of the individual engaged in kickboxing.
- Oftentimes, a successful social media report will lead to additional avenues for investigation.

Issues to Consider: Additional Services & Data Analysis



BASIS FOR FURTHER INVESTIGATION



BASIS FOR FURTHER INVESTIGATION



SOCIAL MEDIA: RETURN ON INVESTMENT

DigiStream analyzed performance metrics from a data set of almost 17,000 days of surveillance nationwide.

- Average surveillance minutes/case without a social media investigation – **40.14 minutes**
- Average surveillance minutes/case with a social media investigation – **56.92 minutes**
- **42%** more video evidence was obtained when pairing surveillance with a social media investigation
- **97%** success rate in locating social media and original content online
- Average of **9 websites** discovered per subject
- Average age of a subject – **48 years**

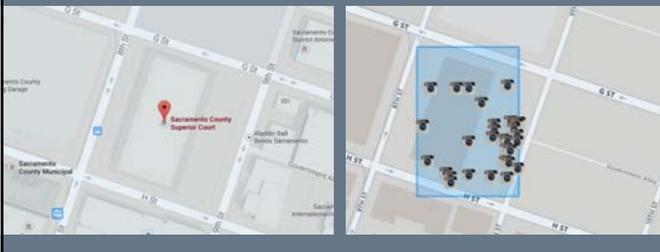
There is tangible value in pairing the two services together



INVESTIGATING PLACES

GEOSOCIAL SWEEPS CONCEPTUAL TRIALS

TRIAL INVESTIGATIONS



GEOSOCIAL SWEEPS CONCEPTUAL TRIALS

TRIAL INVESTIGATIONS



GEOSOCIAL SWEEPS CONCEPTUAL TRIALS

WAREHOUSE & LOGISTICS



GEOSOCIAL SWEEPS

CASE STUDY 1: GEOGRAPHIC HISTORICAL CONTEXT

"Any and all information related to rodents and/or repairs or structural problems anywhere on the premises of the mall. The goal is to prove the mall was negligent in upkeep."



GEOSOCIAL SWEEPS

CASE STUDY 2: EVIDENCE COLLECTION & WITNESS ID



GEOSOCIAL SWEEPS

CASE STUDY 2: EVIDENCE COLLECTION & WITNESS ID



GEOSOCIAL SWEEPS

CASE STUDY 2: EVIDENCE COLLECTION & WITNESS ID



Username kornsbb (Joe Joe)
 Name Joseph Velarde
 Possible Addresses 3 Pettom Rd., Norwalk, CT 06850
 7058 1/2 Hawthorne Ave, Los Angeles, CA 90028
 Possible Phone 203.838.5802, 203.984.9117
 Possible Email *kornsbb@gmail.com, kornsbb@yahoo.com

radmeister
 David Price
 1201 N. Buffalo St., W. Hollywood, CA 90046
 1025 S. Fortuna Ave. #4, W. Hollywood, CA 90046
 410.902.7510, 323.780.2321, *323.840.2527
 *radmeister@gmail.com

**we note that kornsbb@gmail.com is linked to Mr. Velarde's Facebook account*

**we note that Mr. Price tweeted on 5/1/2012 that includes the phone number 323.850.2325
we note that radmeister@gmail.com is linked to Mr. Price's Facebook account

AUTHENTICATION

WHAT IS METADATA?

- The term metadata was first used to describe the information found in card catalogs of libraries

It is essentially "data about data."

- In the context of social media evidence, it is the **digital thumbprint verifying when the content was posted, from where, from whose account and that it is original unaltered.**
- From the evidence standpoint, it is the **best way to establish social media content and ensure it holds up in court.**

AUTHENTICATION

Description	
Resource	
Other info	
Indicating Status	OK
Tags	
MD5 Hash	88198754256857450777647814588
Ingestion	12/11/2013 3:00:16 PM
Link Fetch Status	
Geotagged Text Location	2012171_121898
Image Alt Text	
Mountpoint ID	10773827441038902331
Indicating Expires	
Account Name	John Smith
Home Network	0
Source	Facebook
Collection Type	Public/PersonalAccount
Location Geo	
Location Description	
Location ID	
Tags Text	
Version Number	0
Version ID (Not Latest)	0
Location Geo Labeler	
Location Geo Longitude	

COMMON ISSUES WITH DIY INVESTIGATIONS

- Insufficient technology and resources capable of uncovering material content online
- Inability to effectively find friends and associates to locate content or find alias accounts
- Inability to find outgoing content (85%)
- Incomplete preservation of content in case of deletion
- Insufficient authentication of content
- Lack of effective monitoring
- Inability to provide foundational witness
- Time and energy to do the research (average report: 8 hours)

