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I See Fraud Rings

Stephen Coggeshall
Chief Technology Officer
ID Analytics

June 10, 2013

Overview

- Who is ID Analytics
 - What data do we see
- Identity Manipulation
 - What is it, who does it
- Identity Fraud Rings
 - How to find identity fraud rings
 - Some examples of identity fraud rings
 - Examples of the overlap between commercial identity fraud rings and tax fraud rings

Who Is ID Analytics

- Founded in 2002
- Mission: build solution for growing identity fraud problem
- Methodology: cross industry data consortium, advanced analytics
- Identity risk management products to businesses, identity alerts to consumers
- Sold to Lifelock 3/2012. Now a wholly owned subsidiary
- Experts in identity fraud and identity risk management

Data Flow Visibility

- Core data is applications for account openings: credit cards, cell phones, retail credit (e.g., Nordstrom), payday loans, auto loans.
 ~1.8 billion applications over ~10 years
- Fraud applications: ~3 million fraud attempts
- Other large data sets:
 - U.S. white pages phone book data monthly for about 8 years
 - Credit bureau header files (PII only SSN, Name, Address, Phone, DOB)(SNAPD)
- Other small data sets:
 - Change of addresses
 - Authentication quizzes
 - Consumer enrollments

- Warm/hot addresses
- OFAC lists
- SSA DMF
- SSA area group tables

Identity Resolution – What Is It?

Input is some partial PII:

- John Smith, 123 main street 92130, 8583758374
- Peggy Hodges, 8/14/1978
- Freddy Thompson, 355-85-4857
- Armand Milejas, 4/??/1952, 849-28-3652

Identity Resolution **Machine** Maybe some input characters are wrong (typos, deliberate) **Outputs**

Unique person ID label, SSN, most common name representation, best address, phone, date of birth

- 6TY7F4DX8, 535-64-2871, John Theodore Smith, 123 Main Street 92130, 8586478493, 5/25/1976
- 5IHG8FD4J, 483-83-3827, Margaret Joyce Hodges, 75 Highway 72 87485, 20395684738, 8/14/1978
- J8GK5FDH9, 355-85-4857, Fred Kirk Thompson, 8374 Chestnut Ave 74982, 31295488763, 6/04/1983
- 5MU43JH8L, 849-28-3642, Armand Milejas, 327 Landcaster Ave 27387, 4838279854, 4/26/1952
 - Figures out who this is
 - Fills in missing information
 - Corrects typos or deliberate variations

Identity Manipulation – Who Does It?

- Identity Resolution determines the person associated with an event
- Sort all applications by person and examine variations of PII that people use



- We built an "Identity Manipulation Score" to quantify unusual variations
- Scored 300 million people. Here are some bad ones:

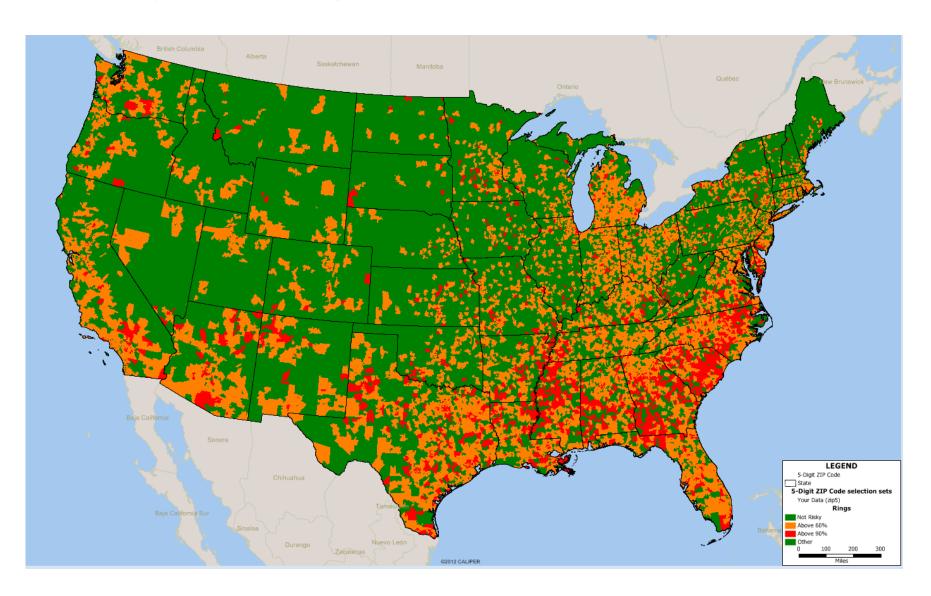
Name	City	IM Score	# SSNs	# DOBs	# FNs	# LNs
John	NY	999	56	12	3	2
Wendy	Detroit	998	23	7	5	10
Dawn	Atlanta	997	15	12	8	7

Example Identity Fraud Rings

Ring ID	City	# Applications	# People	# SSNs	# Credit Cards	# Cell Phones	# Retail Credit		# Last Names	# Dates of Birth	# Addresses
61261	Dearborn, MI	265	15	15	7	253	5	16	16	23	18
24584	Orangeburg, SC	60	4	8	15	34	3	9	6	6	2
48093	Queens, NY	352	6	14	85	7	260	13	19	16	18
36748	Bessemer, AL	283	13	54	42	233	2	30	17	32	8
91340	Las Cruces, NM	285	14	14	55	39	186	14	10	16	8
14673	Miami, FL	133	4	31	7	118	4	12	9	20	7
27323	Tampa, FL	55	4	8	13	10	27	4	2	4	6
12218	Macon, MS	66	4	15	9	48	8	13	8	8	5
100898	Los Angeles, CA	189	4	25	5	174	10	11	15	26	5
50937	Phoenix, AZ	310	5	6	44	1	265	8	3	6	1
80667	Amarillo, TX	302	6	32	41	177	81	11	9	11	4
78629	Philadelphia, PA	178	4	59	4	161	13	6	5	10	3

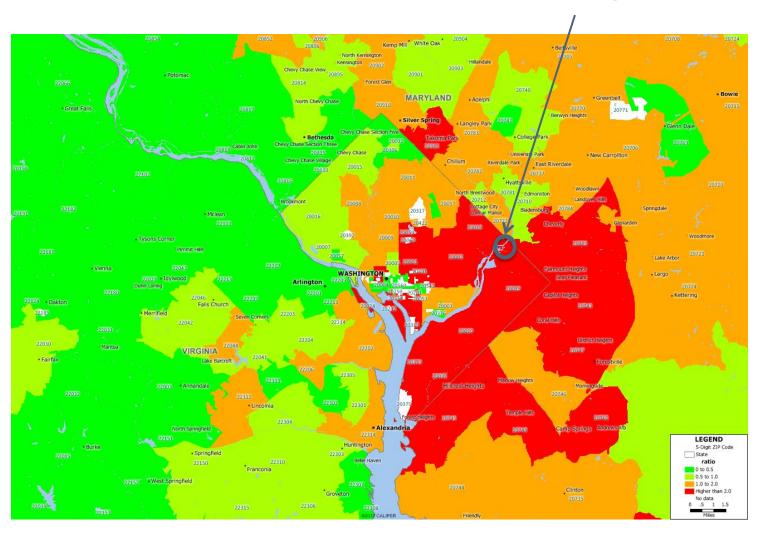
More than 10,000 identity fraud rings
I know who they are, where they live, what they're doing around commercial products

Identity Fraud Ring Locations



Example Fraud Ring #2101

Fraud ring #2101



Washington, DC area

Example Fraud Ring #2101

Six people, Family/Friends Identity Manipulation and Identity Theft

1)	Gerald Smith, 24. Uses 2 FNs.	10 apps
2)	Corona Jones, 24. Uses 2 SSNs, 2 LNs.	12 apps
3)	Corona Jones, 52. Uses 3 SSNs, 2 DOBs, 2 FNs	5 apps

4) Monique Jones, 43. Uses 2 SSNs, 3 LNs.

5) Latasha Jones, 21. Uses 3 SSNs, 2DOBs. 26 apps

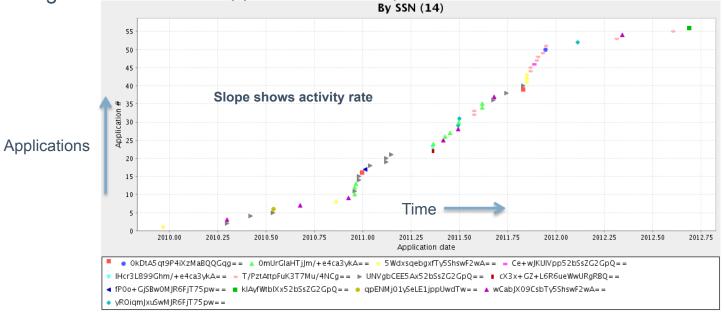
6) Angel Jones, 22. No identity manipulation



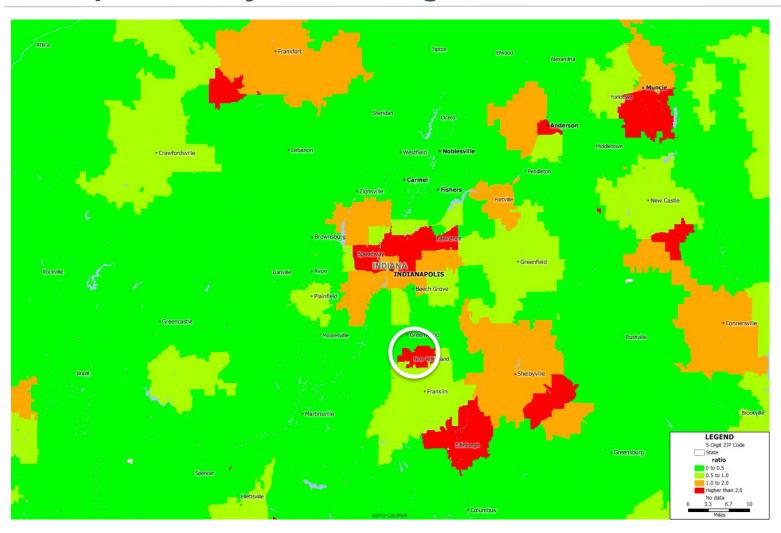
12 apps

- 85 phone & credit card applications from these 6 people from one address (close to Anacostia Park) in Washington, DC over the past 3 years. Sharing of SSNs, DOBs, names.
- An additional 5 ID theft victims; 2 victims are deceased (ID theft of the dead).

Ring is still active: 16 applications in May 2013



Example Identity Fraud Ring #3062



Indianapolis, IN area

Example Identity Fraud Ring

FRAUD RING NO. 3062 | FOUR PEOPLE, FAMILY/FRIENDS IDENTITY MANIPULATION FRAUD

First Name	Last Name	Age	Details	Apps
Hatti	Smith	48	12 SSNs, 3 DOBs, 2 FNs, 3 LNs	194
Frank	Smith	75	7 SSNs, 5 DOBs, 2 FNs, 2 LNs	117
Dottie	Smith	71	2 SSNs, 3 DOBs, 4 FNs, 2 LNs	10
Freida	Jones	48	2 SSNs, 2 LNs	24

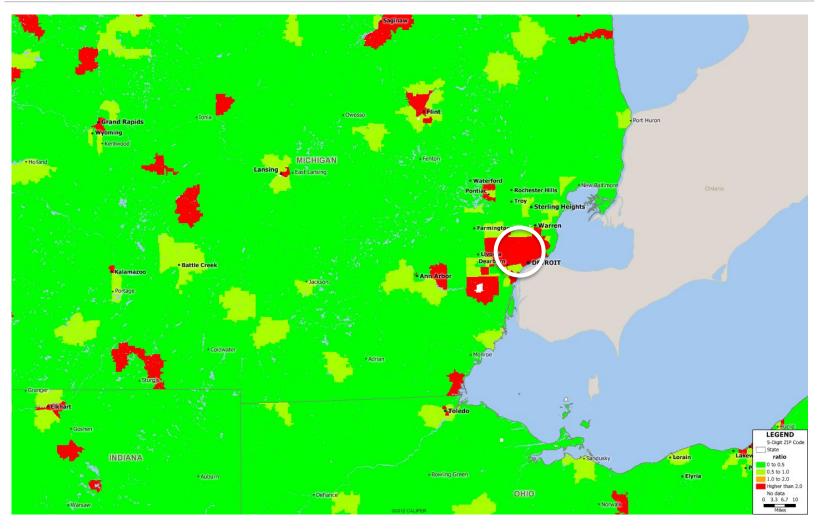


- 345 credit card apps, 1
 payday loan from these 4
 fraudsters from 2 addresses.
 Frank uses his college email
 (retired professor).
- Started with Frank and Hatti, then Dottie. Later Freida joined.
- ID Score caught 97%



Indianapolis, IN area

Example Identity Fraud Ring #29235



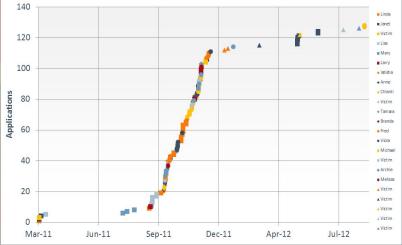
Detroit, MI

Example Identity Fraud Ring #29235

Who	What	Age	# Apps	# SSNs	# DOBs	# FNs	# LNs
Linda	Fraudster	37	28	2	2	1	2
Michael	Fraudster	57	13	2	1	1	2
Janet	Fraudster	18	13	1	2	1	3
Fred	Fraudster	56	12	1	3	1	2
Lisa	Fraudster	22	10	2	1	2	5
Viola	Fraudster	54	10	3	3	3	4
Tamara	Fraudster	21	6	1	2	1	2
Larry	Fraudster	32	6	1	1	1	1
Archie	Fraudster	40	5	1	2	1	1
Chianti	Fraudster	22	4	2	1	4	1
Mary	Fraudster	56	4	1	2	1	2
Latisha	Fraudster	26	3	1	3	4	1
Anne	Fraudster	31	3	1	2	4	3
Melissa	Fraudster	43	2	1	2	3	2
Brenda	Fraudster	36	2	4	2	2	2
Johnny	Victim?	24	3	1	1	1	1
Christopher	Victim	31	2	1	1	1	1
Aaron	Victim	43	2	1	1	1	1
Chuangaree	Victim	40	1	1	1	1	1
Karen	Victim	21	1	1	1	1	1
Michael	Victim	31	1	1	1	1	1
Hazel	Victim	42	1	1	1	1	2
Leon	Victim	61	1	1	1	1	1



- 133 cell phone applications from 2 addresses, ID Score caught 95%
- Mother and 2 daughters. Father(?) and 2 children
- Family and friends doing identity manipulation and identity theft



Can We Find Tax Fraud Rings In Our Commercial Data?

- We have minimal information (name, age, city) on three tax identity fraud rings from newspaper articles
 - Statesboro, GA
 - Long Island, NY
 - Los Angeles, CA
- Can we find the "published" people in our commercial activity data?
- If yes, do we see any connections with the fraud rings we find in commercial activity?

Statesboro Tax Fraud Ring

- 21 individuals in Georgia, 1 in Ohio, and 1 in Florida were charged with illicitly obtaining and utilizing individuals PII from medical records to obtain tax refunds
- Weak overlap with our commercial fraud ring data (Ring #110293), only linked by a previous address.
- But three of these tax fraudsters also have substantial history manipulating their identities on commercial products

We find evidence of identity misuse by some of the arrested people in our commercial data

Long Island Tax Fraud Ring "Operation Refund Racket"

- 7 people arrested filing \$60,000 in fraudulent tax refunds
 - 5 more people sought after in the investigation
- Returns were loaded to debit cards and then used to purchase money orders
- One person has substantial application velocity after being arrested, attempting to get a cell phone(s)
- One identity identified as being part of commercial fraud ring (Ring #24790)
- Majority of activity linking to a home in Hempstead, NY
 - Activity significant at end of 2011
 - Cell phones targeted in this activity
 - 18 identities identified in this ring
 - 6 identities have significant history manipulating PII

We see overlap of this tax fraud ring with an identified fraud rings in our commercial data



Los Angeles Tax Fraud Ring

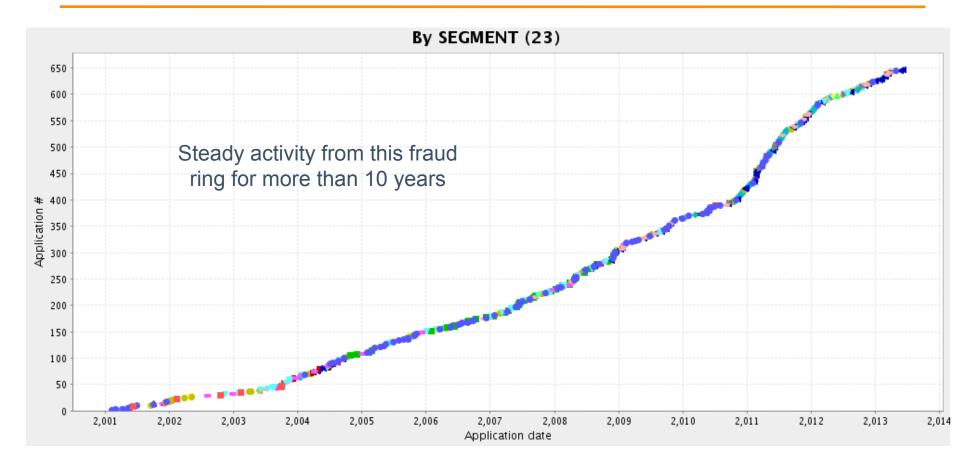
• On February 27, 2013 eight people were charged in connection to using stolen identities to commit \$19 MM in tax refund fraud:

Artak (Max) Berberyan, 33	Van Nuys
Armen (Roman) Berberyan, 33	Van Nuys
Suren (Sunny) Gambaryan, 33	North Hollywood
Ashot Karapetian, 47	North Hollywood

Vigen (Vic) Tsaturyan, 47	Sun Valley
Arman Zargaryan, 30	Granada Hills
Akop (Jack) Kantrdzyan, 33	Sylmar
David (Little Guy) Samsonyan, 31	Winnetka

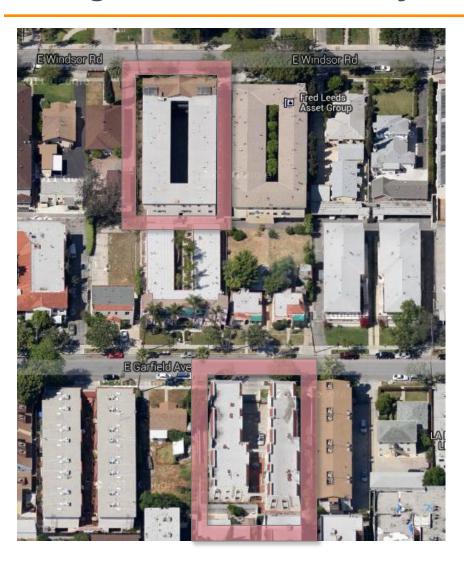
- Accused of fraudulently filing more than 2,500 income tax returns, using more than 1,800 identities
 - Many victims are retirees and residents of homeless shelters
- 6 individuals were arrested and 2 of them were still sought by authorities
- ID Analytics used the names and ages from the article and found that one individual was involved in a fraud ring that we identified (Ring #8736)
 - Akop Kantrdzyan, has a high Identity Manipulation Score

Ring #8736, LA Armenian Ring **Observed Commercial Activity**



Dark blue – credit card Light blue – retail credit Green – cell phone Red – utility

Ring #8736, LA Armenian Ring Strange Address Similarity

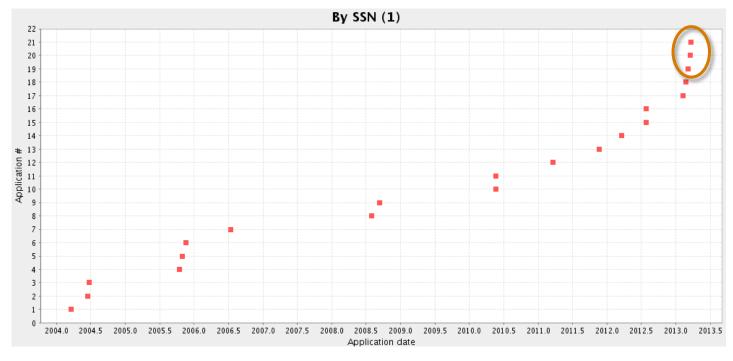


- 704 E Garfield Ave Apt 15, 91205
- 704 E Windsor Rd Apt 15, 92105
- Very suspicious that two identities involved in this ring have application activity at two similar addresses in the same distinct unit

Ring #8736, LA Armenian Ring

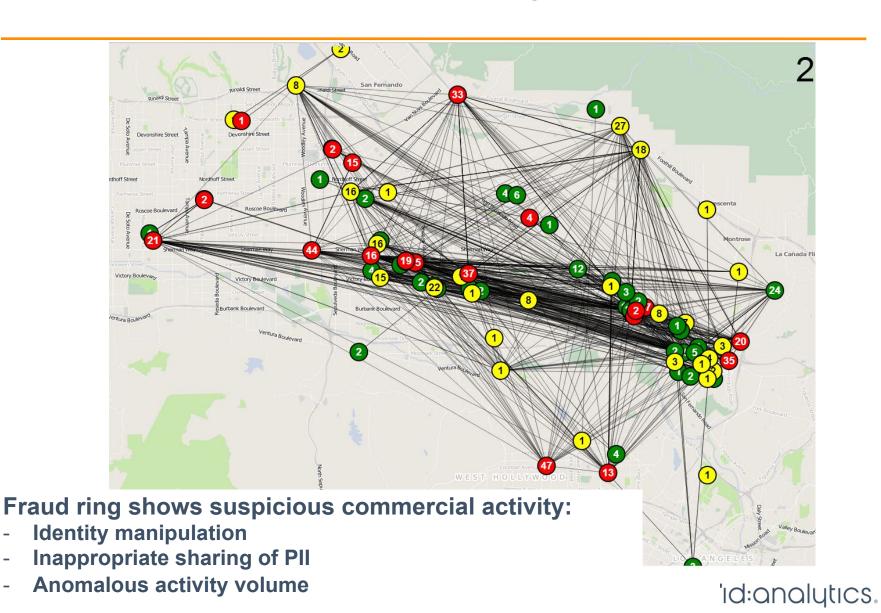
Sought-After Fugitive Is Active After Others Detained

- One individual submitted 3 applications immediately after 2/28 article date calling him a sought-after individual
- He applies for two bank cards and a cell phone between 3/2 and 3/17
- Applications submitted using two addresses (one address twice once listing unit – one not listing). We know the addresses.



Ring #8736, LA Armenian Ring

Evolution Shows Anomalous Activity and Connections



Summary

- There exist well-developed tools in the private sector to find and prevent identity fraud
 - Identity fraud scores
 - Identity manipulation scores
 - Identity fraud ring membership scores
- We see overlap with tax identity fraud rings and commercial identity fraud rings
- This can provide substantial help for
 - Investigating known tax fraud rings
 - Finding additional people associated with known tax fraud rings
 - Finding previously-unknown tax fraud rings

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