Architecture Of Global Surveillance

Raj Goel, CISSP
raj@brainlink.com
917-685-7731
www.RajGoel.com
I kept dreaming of a world
I thought I'd never see.
And then one day...
I got in.

- Kevin Flynn
Reality
Lifecycle Of A Child
From Pre-birth Thru College

Image courtesy of Banksy
Necessary Identifiers

- Mother’s Maiden Name
- Date Of Birth
- City Of Birth
- Name
- Phone
GRACE DUNLAN & DALLON BOURJET

WERE UNITED AS ONE IN MARRIAGE IN A PRIVATE CEREMONY IN MAUI, HAWAII ON MAY 1ST, 2010.

YOU ARE INVITED TO ATTEND AN OPEN HOUSE RECEPTION HELD IN CELEBRATION OF THEIR UNION ON MAY 29TH, 2010 BETWEEN 4 - 7 P.M. GREAT OAKS PARK GLENDALE, CALIFORNIA

cardchef.com
Date Of Birth (potential)
Facebook is your friend

Expecting a Baby

2012
Date Of Birth (and siblings too!)

EMMA LAINE ANDERSON

june 13th, 2013
6 pounds 7 ounces
20.5 inches
welcomed with love by
JENNA, DAVID & BIG SIS EMMA
City Of Birth

St. James Mercy Hospital
411 Canisteo Street
Hornell, NY 14843
(607) 324-8000
information@sjmh.org
www.stjamesmercy.org

Little Miracles at St. James Mercy Hospital

- Augustus Gregory
  born to Elizabeth and Anthony March 24, 2014

- Nora Marie
  born to Steve and Jared March 20, 2014

- Anna Marie
  born to Katelynne and Mark March 18, 2014

- Kiera Lynn
  born to Janet and Cameron March 18, 2014
Delivery Nurse?

Somerset Hospital
225 South Center Avenue
Somerset, PA 15501
Phone: (814) 443-5000
© Copyright 2012 Somerset Hospital

http://www.somersethospital.com/
Stranger Hacks Into Baby Monitor and Screams at Child

According to Heather Schreck, the stranger was yelling at her 10-month-old daughter Emma, "‘Wake up baby. Wake up baby.’ Then just screaming at her trying to wake her up.” Then Adam Schreck, the baby’s father, said when he ran into the room, the camera turned and started shouting at him.

In August 2013, NewsFeed reported via ABC13 that in Houston, a stranger saw a two-year-old girl’s name written on her bedroom wall via the Internet-connected cam and started making abusive comments like “‘Wake up you little sl#t.’”

How do we get phone #?

My name is: S.G
If I’m lost, please call: 718-510-2082

My name is: S.G
If I’m lost, please call: 718-510-2082

My name is: S.G
If I’m lost, please call: 718-510-2082

My name is: S.G
If I’m lost, please call: 718-510-2082

My name is: S.G
If I’m lost, please call: 718-510-2082

My name is: S.G
If I’m lost, please call: 718-510-2082
New York parents furious at program, inBloom ($100M, funded by Gates, Murdoch, etc), that compiles private student information for companies that contract with it to create teaching tools

Read more: http://www.nydailynews.com/new-york/student-data-compiling-system-outrages-article-1.1287990#ixzz32HxtpQ1h
School pays $70K to student forced to give up Facebook password

Principal creates fake account to spy on students
Teenage Goldmine

**Facebook & Teens**

93% of teen social media users have a Facebook account.

55% of teens have given out personal info to someone they don’t know, including photos and physical descriptions.

29% have posted mean info, embarrassing photos or spread rumors about someone.

29% have been stalked or contacted by a stranger or someone they don’t know.

24% have had private or embarrassing info made public without their permission.

Source: pewinternet.org / “Social networking in America” [Feb. 2012]

www.sociallyactive.com
Children and young people are posting thousands of sexually explicit images of themselves and their peers online, which are then being stolen by porn websites, according to a leading internet safety organisation.

A study by the Internet Watch Foundation (IWF) reveals that 88% of self-made sexual or suggestive images and videos posted by young people, often on social networking sites, are taken from their original online location and uploaded on to other websites.

Reams of sexually explicit images and videos are being uploaded by children and young people, the study found. During 47 hours, over a four-week period, a total of 12,224 images and videos were analysed and logged. The majority of these were then mined by “parasite websites” created for the sole purpose of displaying sexually explicit images and videos of young people.

Bobbi Duncan desperately wanted her father not to know she is lesbian. Facebook told him anyway.

One evening last fall, the president of the Queer Chorus, a choir group she had recently joined, inadvertently exposed Ms. Duncan’s sexuality to her nearly 200 Facebook friends, including her father, by adding her to a Facebook Inc. discussion group. That night, Ms. Duncan’s father left vitriolic messages on her phone, demanding she renounce same-sex relationships, she says, and threatening to sever family ties. The 22-year-old cried all night on a friend’s couch. “I felt like someone had hit me in the stomach ...
Surveillance Nations

Image courtesy of Banksy
What to teach your Kids, Employees & Interns About Social Media

“Everything You Say Can And Will Be Used Against You, By Anybody, Now Or Decades Into The Future.” – Falkvinge
How can we monitor everything?

Most of the world's communications are flowing through the U.S.

So is your targets' data.

http://fr.slideshare.net/EmilandDC/dear-nsa-let-me-take-care-ou
PRISM – The Players

From which sources?

Microsoft
Google
Yahoo!
01/14/09
09/11/07

Facebook
Paltalk
YouTube
06/03/09
03/12/08
12/07/09

Skype
Aol
Apple
02/06/11
09/24/10
03/31/11

2007
2008
2009
2010
2011
2012
2013

http://fr.slideshare.net/EmilandDC/dear-nsa-let-me-take-care-ou
for a long time, the Department of Justice DOJ argued ECPA allowed it to circumvent the Fourth Amendment and access much of your email without a warrant.

Securities and Exchange Commission SEC, may be doing the same exact thing: it is trying to use ECPA to force service providers to hand over email without a warrant, in direct violation of the Fourth Amendment.

ECPA has been used to argue that emails older than 180 days may be accessed without a warrant based on probable cause. Instead, the agencies send a mere subpoena, which means that the agency does not have to involve a judge or show that the emails will provide evidence of a crime.

https://www.eff.org/deeplinks/2014/04/sec-obtaining-emails-without-warrant-or-not
Utah law enforcement officials searched, without a warrant, the prescription drug records of 480 public paramedics, firefighters and other personnel to try to figure out who was stealing morphine from emergency vehicles.

The warrantless search of Utah’s database chronicling every controlled substance dispensed by a pharmacist resulted in charges against one paramedic that have nothing to do with the original investigation. Instead, the authorities discovered an employee whose records exhibited “the appearance of Opioid dependence” and lodged prescription fraud charges against paramedic Ryan Pyle. Now Pyle faces a maximum five-year prison sentence if convicted of the felony.

Once upon a time, when it came to hi-tech phone surveillance, the NSA used to be the only game in town.

And while some of the capabilities exposed by former contractor Edward Snowden are indeed mind-blowing, these days anyone — from your best friend, to your worst enemy — now has the ability to listen into your most intimate conversations, and it’s only a few smartphone clicks away.

One of the newest apps that puts that kind of once formidable processing power – in the palm of your hands is called Crowd Pilot.

http://www.rajgoel.com/2014/02/the-age-of-personal-surveillance-is-here/
Prince George, The Panopticon Kid

- **Charlie Stross**, “This prince is going to find things a little different because he’s going to be the first designated future British monarch to grow up in a hothouse panopticon, with ubiquitous surveillance and life-logging ...I expect there to be Facebook account-hacking attacks on his friends, teachers, and associates—and that’s just in the near term. He’s going to be the first royal in the line of succession to grow up with the internet: his father, Prince William, was born in 1982 and, judging by his A-level coursework, is unlikely to have had much to do with computer networking in the late 1990s. This kid is going to grow up surrounded by smartphones, smart glasses (think in terms of the ten-years-hence descendants of Google Glass), and everything he does in public can be expected to go viral despite the best efforts of the House of Windsor’s spin doctors.”

What Does Facebook Sell About You To Corporations, Governments, etc?

https://twitter.com/TheBakeryLDN/status/427531934294880256/photo/1
Technology giant NEC's Hong Kong branch is promoting a small, "easy to install" appliance which will enable businesses to monitor their customers based on facial recognition.

From a recent NEC press release:

- The new Mobile Facial Recognition Appliance enables organizations in any industry to offer an ultra-personalized customer experience by recognizing the face of each and every customer as soon as they set foot on the premises.

As Lesley Stahl reported on "60 Minutes", "the ability of computers to identify faces has gotten 100 times better, a million times faster, and exponentially cheaper."

The "60 Minutes" segment gives an in-depth account of all the scary advancements in the field – highlighting the technology's ability to track your whereabouts, mine your personal data, and even predict your social security number.

Facebook Side Profiling

Computers Beat Humans

- The Face Recognition Algorithm That Finally Outperforms Humans
- Computer scientists have developed the first algorithm that recognises people’s faces better than you do
  - Humans: 97.53%
  - Machine: 98.52%

https://medium.com/the-physics-arxiv-blog/2c567adbf7fc
Target has figured out how to data-mine its way into your womb, to figure out whether you have a baby on the way long before you need to start buying diapers.

Lots of people buy lotion, but one of Pole’s colleagues noticed that women on the baby registry were buying larger quantities of unscented lotion around the beginning of their second trimester. Another analyst noted that sometime in the first 20 weeks, pregnant women loaded up on supplements like calcium, magnesium and zinc. Many shoppers purchase soap and cotton balls, but when someone suddenly starts buying lots of scent-free soap and extra-big bags of cotton balls, in addition to hand sanitizers and washcloths, it signals they could be getting close to their delivery date.

http://www.nytimes.com/2012/02/19/magazine/shopping-habits.html
For the past nine months, Janet Vertesi, assistant professor of sociology at Princeton University, tried to hide from the Internet the fact that she's pregnant — and it wasn't easy.

Pregnant women are incredibly valuable to marketers. According to Vertesi, the average person's marketing data is worth 10 cents; a pregnant woman's data skyrockets to $1.50. And once targeted advertising finds a pregnant woman, it won't let up.

“I used [Tor] for BabyCenter.com.“

When her husband tried to buy $500 worth of Amazon gift cards with cash in order to get a stroller, a notice at the Rite Aid counter said the company had a legal obligation to report excessive transactions to the authorities.

“Those kinds of activities, when you take them in the aggregate ... are exactly the kinds of things that tag you as likely engaging in criminal activity,”

FBI Plans to Have 52 Million Photos in its NGI Face Recognition Database by Next Year

- NGI builds on the FBI’s legacy fingerprint database—which already contains well over 100 million individual records—and has been designed to include multiple forms of biometric data, including palm prints and iris scans in addition to fingerprints and face recognition data. NGI combines all these forms of data in each individual’s file, linking them to personal and biographic data like name, home address, ID number, immigration status, age, race, etc. This immense database is shared with other federal agencies and with the approximately 18,000 tribal, state and local law enforcement agencies across the United States.

“In a secret test of mass surveillance technology, the Los Angeles County Sheriff's Department sent a civilian aircraft* over Compton, California, capturing high-resolution video of everything that happened inside that 10-square-mile municipality.

Compton residents weren't told about the spying, which happened in 2012. "We literally watched all of Compton during the times that we were flying, so we could zoom in anywhere within the city of Compton and follow cars and see people," Ross McNutt of Persistence Surveillance Systems told the Center for Investigative Reporting.
Russian law gives Russia’s security service, the FSB, the authority to use SORM “System for Operative Investigative Activities” to collect, analyze and store all data that transmitted or received on Russian networks, including calls, email, website visits and credit card transactions.

- SORM has been in use since 1990 and collects both metadata and content.
- SORM-1 collects mobile and landline telephone calls.
- SORM-2 collects internet traffic.
- SORM-3 collects from all media including Wi-Fi and social networks and stores data for three years.

SORM is routinely used against political opponents and human rights activists to monitor them and to collect information to use against them in “dirty tricks” campaigns. Russian courts have upheld the FSB’s authority to surveil political opponents even if they have committed no crime.

Russia used SORM during the Olympics to monitor athletes, coaches, journalists, spectators, and the Olympic Committee, publicly explaining this was necessary to protect against terrorism. The system was an improved version of SORM that can combine video surveillance with communications intercepts.

Chinese Democracy

- All important foreign sites are cloned for the Chinese audience
- Servers MUST be located in China
- Companies are required to self-censor AND pay for censors
- 50-cent Army publishes government narrative
- Regions can be isolated from the internet without users being aware
  - Developed by Cisco, Blue Coat Systems, etc.
  - Refined by China
Next Steps

1. EDUCATE yourself and the young people in your life on the REALITY of privacy
2. LOBBY your elected officials and others to DEFEND your 1st, 4th & 5th Amendment rights (US) or EU Human Rights
3. Review your foreign travel technology plans
4. JOIN the EFF
5. Adopt the Canadian/PIPEDA Approach
6. Demand a LEMON LAW for Software
In every generation, a new King John; a new Khruschev and a new Solzhenitsyn is born. It's OUR job as citizens to DEFEND the rights given to us by our respective constitutions and DEMAND that they be conferred on our WEAKEST citizens, not just the strongest or the wealthiest.

Privacy is a human right….not a luxury
Contact Information

Raj Goel, CISSP
Chief Technology Officer
Brainlink International, Inc.
C: 917-685-7731
raj@brainlink.com
www.RajGoel.com
www.linkedin.com/in/rajgoel

Author of “The Most Important Secrets To Getting Great Results From IT”
http://www.amazon.com/gp/product/0984424814