

Google AdWords is an online advertising service that places advertising copy at the top or bottom of, or beside, the list of results Google displays for a particular search query

CS 88S

Your Data in the Cloud

Week 7

Agenda

- *Review last week's material*
- *Targeted Advertising*
- *Privacy Laws in the United States vs. Europe*
- *A Hypothesis on Amazon Go*
- *Frank Chen & the Privacy Hallows*

In the News

Posts Tagged: Wanna.Cry ransomware

Other — 88 Comments

**13 Microsoft Issues WanaCrypt Patch for
Windows 8, XP**

Source: <http://bit.ly/2r6NYe0>

Online pirates claim to hold Disney's latest 'Pirates of the Caribbean' movie hostage, demand ransom

Source: <http://lat.ms/2raIkYc>



Next Week...

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SSL Transaction



Source: <http://bit.ly/2pTzoTY>

*****Note:** To further understand the relationship between SSL and HTTP, you'll first need to understand the OSI model of Computer Networks, which is out of the scope of this class.

Authentication

What you know



What you own



Who you are



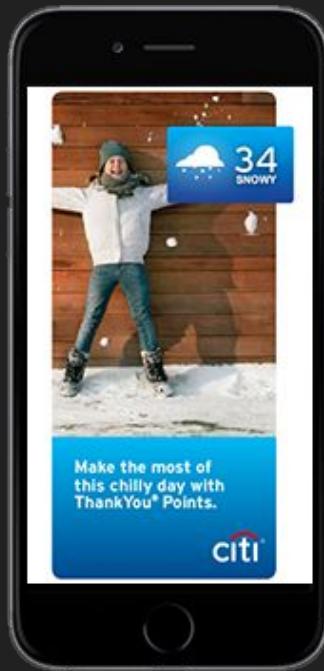
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Simple Targeting

The screenshot shows a YouTube video player interface. At the top, there is a navigation bar with a menu icon, the YouTube logo, and a search bar. Below the video player, the video title is "Everything GREAT About Prometheus!". The video has 16,368 views. The video frame displays a slide from a presentation. The slide has a dark background with white text. It features a profile picture of a person with a green 'G' logo, the text "Better Writing with Grammarly", and an email address "dave@acmepublishing.com". Below this, the word "Important" is written. A red underline highlights the word "Lets" in the sentence "Lets suppose that you're writing a really important email t". A grammarly suggestion box appears over the sentence, showing the correction "Lets → Let's" with a green underline. At the bottom of the slide, there are two buttons: "CORRECT WITH GRAMMARLY" and "IGNORE". The video player also shows a progress bar at 0:03 / 1:19 and various control icons like play, volume, and settings.

Triggered Targeting



Re-Targeting

More items to consider [See more](#)



Inspired by your browsing history [See more](#)

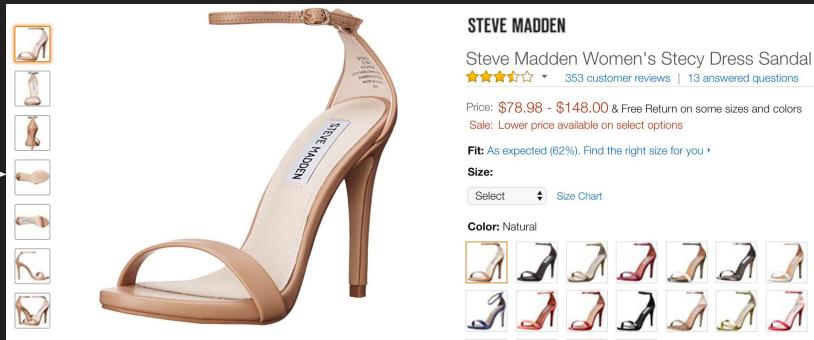


Behavioral Targeting

Messenger

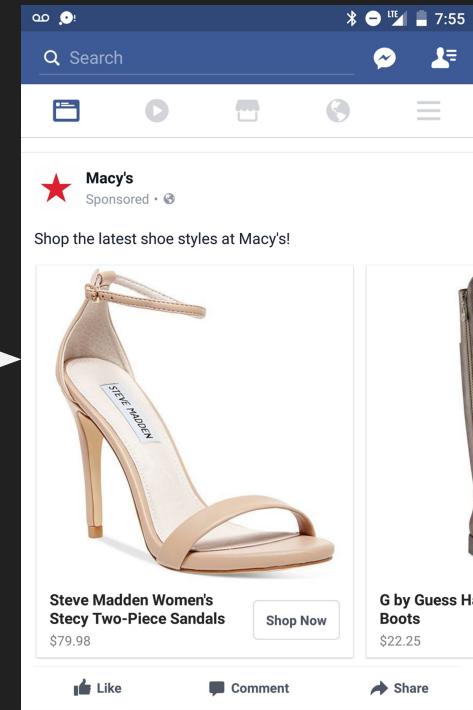


Amazon.com



A screenshot of an Amazon product page for Steve Madden Women's Stacey Dress Sandals. The main image shows a single tan sandal. To the left is a vertical grid of nine smaller shoe images, with the top one highlighted in orange. The product title is "STEVE MADDEN Steve Madden Women's Stacey Dress Sandal". It has a 4-star rating from 353 reviews. The price is listed as \$78.98 - \$148.00 & Free Return on some sizes and colors. A "Fit: As expected (62%). Find the right size for you." link is present. A "Size:" dropdown menu is open, showing "Select" and a "Size Chart" link. Below the size chart, there is a section for "Color: Natural" with a grid of twelve shoe images in various colors.

Facebook



A screenshot of a Facebook mobile application interface. At the top, there is a navigation bar with icons for messages, notifications, and account settings. The main content area features a sponsored post from "Macy's" with a red star icon. The post text reads "Shop the latest shoe styles at Macy's!". Below the text is an image of the same Steve Madden Stacey Dress Sandal shown on the Amazon page. To the right of the main image, there is a partial view of another shoe listing for "G by Guess H Boots". At the bottom of the screen, there are standard Facebook interaction buttons for "Like", "Comment", and "Share".

A Case Study: Facebook



EPSILON®



A Case Study: Facebook



About

Overview

- Work and Education
- Places You've Lived
- Contact and Basic Info
- Family and Relationships
- Details About You
- Life Events

ABOUT YOU

+ Write some details about yourself

NAME PRONUNCIATION

+ How do you pronounce your name?

OTHER NAMES

+ Add a nickname, a birth name...

FAVORITE QUOTES

+ Add your favorite quotations

Manage Sections

Drag to reorder

Name	Section	Value
Videos	Video	checked
Check-Ins	Check-in	unchecked
Sports	Sport	unchecked
Music	Music	unchecked
Movies	Movie	unchecked
TV Shows	TV Show	unchecked
Books	Book	unchecked
Apps and Games	App	unchecked
Likes	Like	unchecked
Following	Following	checked
Events	Event	unchecked

Uncheck to hide sections. Individual stories in hidden sections can still appear on your Timeline, in News Feed and elsewhere on Facebook.

Save **Cancel**

A Case Study: Facebook



Status | Photo/Video | Live Video | Life Event X

- Work & Education
- Family & Relationships
- Home & Living
- Health & Wellness
- Travel & Experiences

Tech Companies or Ad Companies?



"Mobile now makes up 84 % of ad revenue"

Source: <http://tcrn.ch/2ktzjFU>



"Alphabet's revenue hit \$21.5 billion, a 21 percent year-over-year increase. Of that revenue, \$19.1 billion came from Google's advertising business"

Source: <http://bit.ly/2rf5Boe>

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A photograph of a forest scene. The foreground is covered in green grass with dappled sunlight. The background is filled with many tall, thin trees, likely pine or similar coniferous trees, standing closely together. Sunlight filters down from the top through the branches, creating bright highlights on the trunks and leaves.

Some Scenarios

Bad News

You find some links on search engines to news articles about pranks you've done in the past.
What can you do about it?

Europe

You can ask search engines to remove links to the news article

United States

First Amendment of the Constitution protects freedom of expression

Hacked!

You find that your credit card has purchases that you don't recognize. Your bank had a data breach. Should they notify you immediately?

United States

Notification requirements vary by industry.

Europe

Must notify national regulators within 3 days

Data in the Cloud

You've used Google to search, Amazon to shop, and Twitter to get followers. What can these companies do with your data?

United States

There is no federal law that says people can ask for records of their data

Europe

You can ask any company to send you details about the data it holds on you, and what they are doing with that data

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INTRODUCING
amazon go



Frank Chen | Spring 2017

A wide-angle photograph of an industrial complex, likely a grain elevator or processing plant, set against a dramatic sky filled with dark, heavy clouds. The sun is low on the horizon, casting a warm glow through the clouds. In the foreground, there's a construction or storage area with various industrial structures, some with "ALTERRA" branding. The overall atmosphere is one of a major industrial site under a vast, dynamic sky.

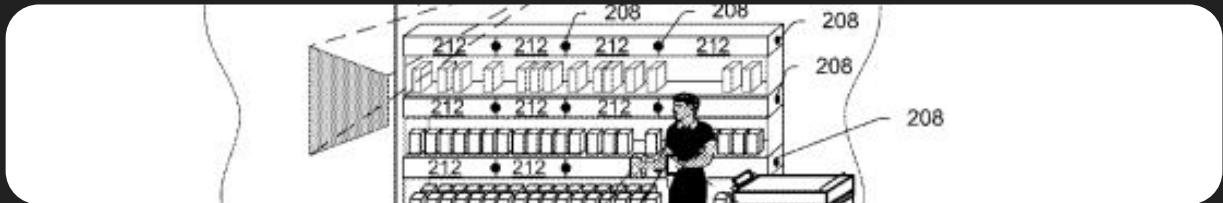
How do you change an entire industry?

3 Steps

Make a video



Get the Patents



Prove then Wait

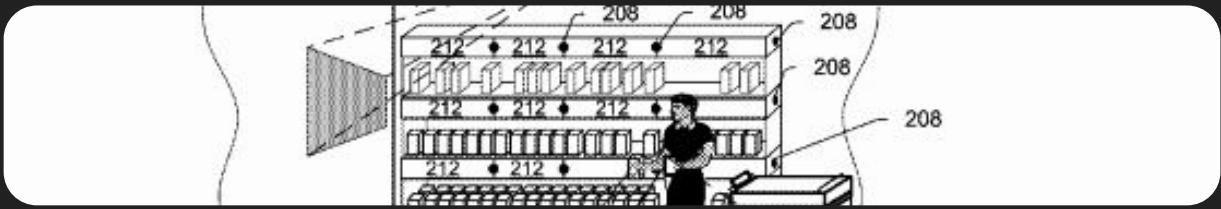


3 Steps

Make a video



Get the Patents



Prove then Wait



Amazon Go Promo Video

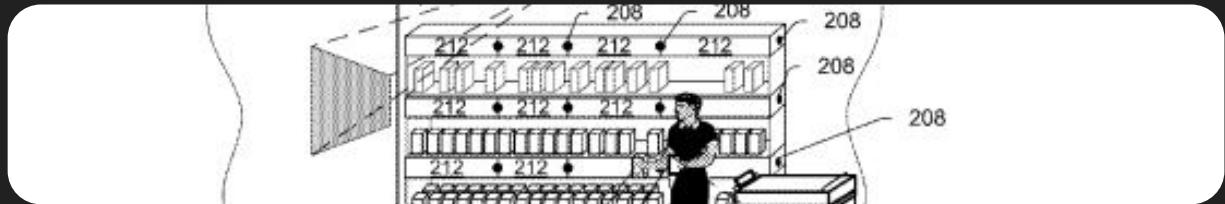


3 Steps

Make a video



Get the Patents



Prove then Wait



Amazon Go Patents

Transitioning items from a materials handling facility

US 20150012396 A1

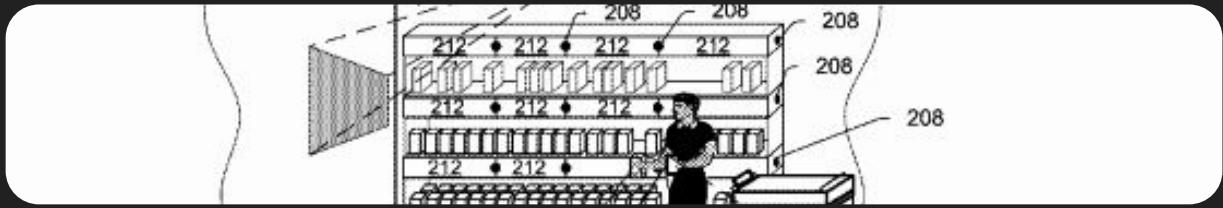
"This disclosure describes a system for automatically transitioning items from a materials handling facility without delaying a user as they exit the materials handling facility."

3 Steps

Make a video



Get the Patents



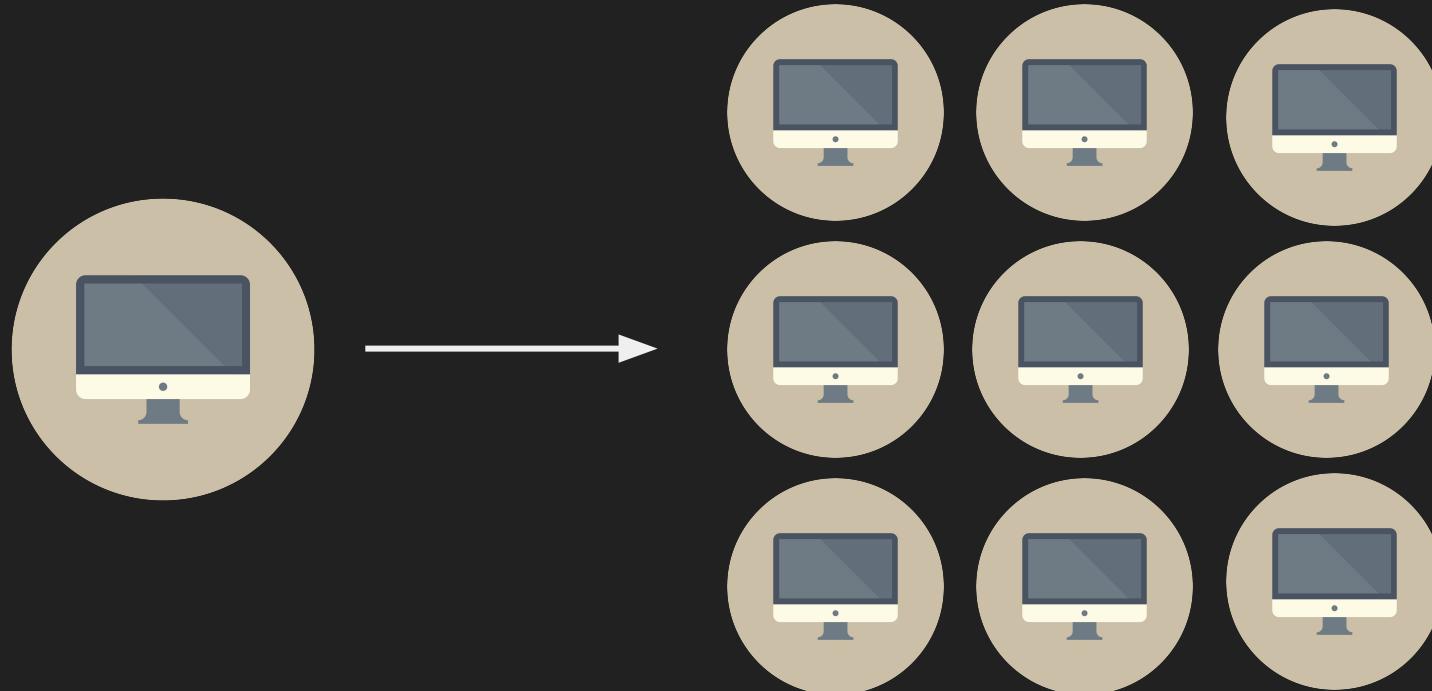
Prove then Wait



Amazon AWS



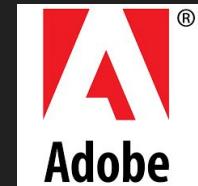
Amazon AWS



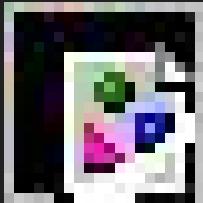
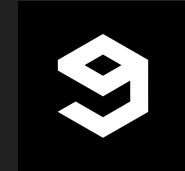
What websites are hosted on AWS?



NETFLIX



ticketmaster®



coursera



And many, many more...

PROVE

the Prototype

GeekWire NEWS ▾ JOBS EVENTS ▾ RESOURCES ▾ DEALS ABOUT ▾ f t r s Search

Trending: Saturday Night Live spoof: Amazon 'Echo Silver' is 'designed for the greatest generation'

Amazon to open first 'self-driving' grocery store, with no checkout lines, in Seattle in early 2017

BY TODD BISHOP on December 5, 2016 at 7:09 am

17 Comments f Share 11 Tweet in Share 370 Reddit Email

GeekWire Cloud Tech Summit tix here!

Introducing Amazon Go and the world's most advanced shopping... 

INTRODUCING
amazon go

Amazon just unveiled details of a new brick-and-mortar convenience store that will

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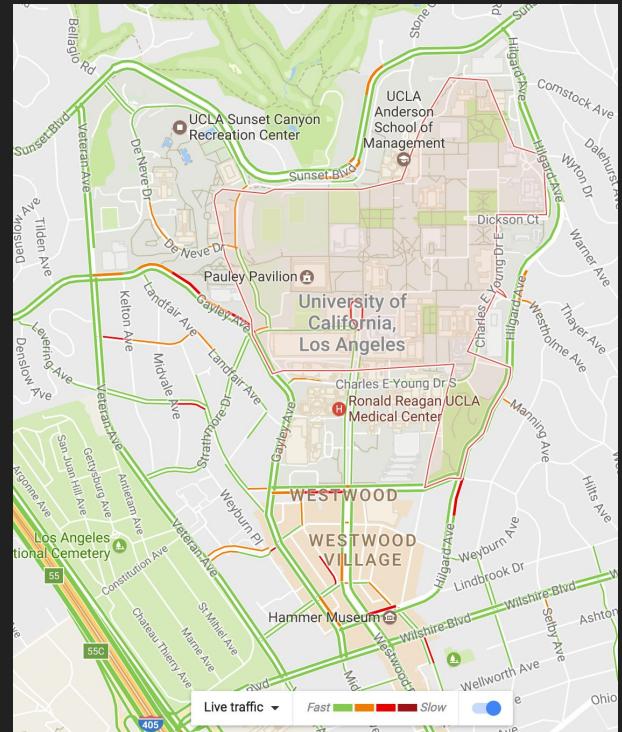
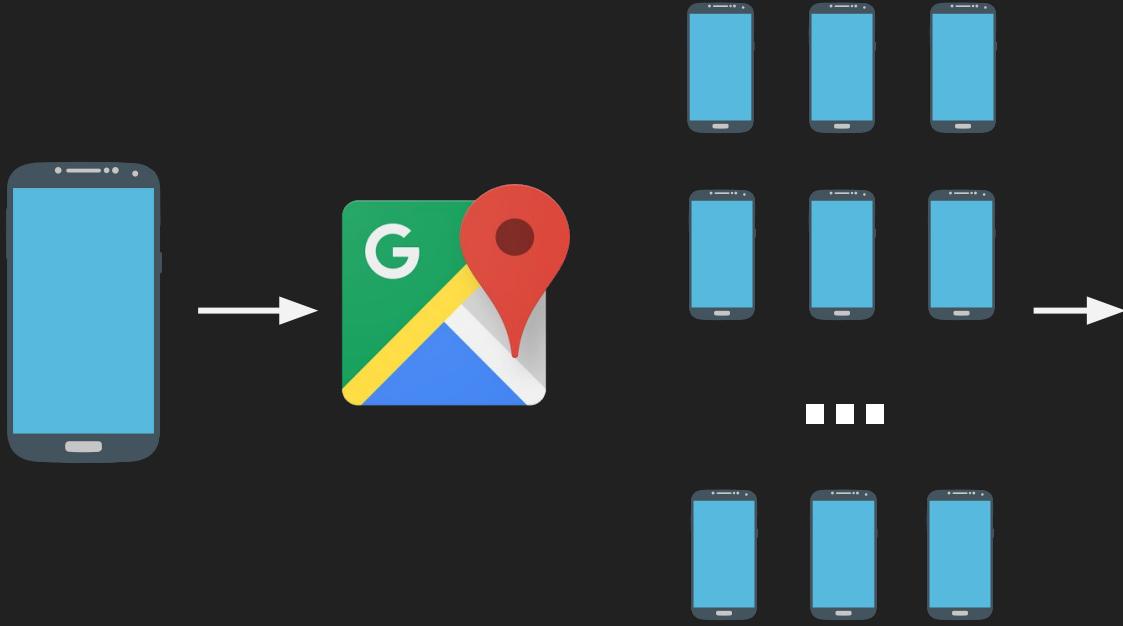
Have a scoop that you'd like GeekWire to cover? Let us know.

WAIT

for the Data Collection



Another Example: Google Traffic



Source: <http://bit.ly/2hJbeG4>

Frank Chen | Spring 2017

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The Privacy Hallows





"Become the Master of Privacy"

The Privacy Hallows



- *The Elder Wand*
- *The Resurrection Stone*
- *The Invisibility Cloak*

The Elder Wand

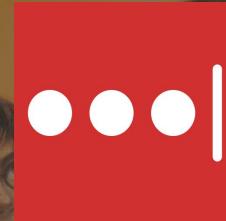


KALI LINUX™

"the quieter you become, the more you are able to hear"



The Resurrection Stone



The Invisibility Cloak



DuckDuckGo



About Us

Smarter search without the tracking.



Real Privacy

We don't track you.

What you search for is your own business and we'd like to keep it that way. That's why we don't collect any personal information and therefore, have none to share.

[Our Policy](#)



Community

Our Extended Team.

Our search engine is more than just servers and an algorithm. Our community directly contributes to DuckDuckGo. Get involved in changing the future of search.

[Get Involved](#)



Smarter Search

Get answers quicker.

It's our goal to get you where you want to go in fewer clicks. We do that through instant answers, themes and !bangs. We have everything you'd expect and a whole lot more.

[Take a Tour](#)



Safety in the Cloud Tip

Never
volunteer
information

Comic depicting the consequences of creating an iPhone backdoor



In Two Weeks...