

# MIS 0855 Spring 2015 – Data Science

## *Day 34 – Beyond Numbers*


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*Apr. 8<sup>th</sup>, 2015*


# Structured vs. Unstructured Data


My 10 Day Forecast Updated: Oct 11, 2014, 1:34pm EDT [Desktop App](#)


**Today**  
Oct 11  **57°** 47°  
CHANCE OF RAIN: 20% WIND: N at 8 mph  
Cloudy [Details](#)

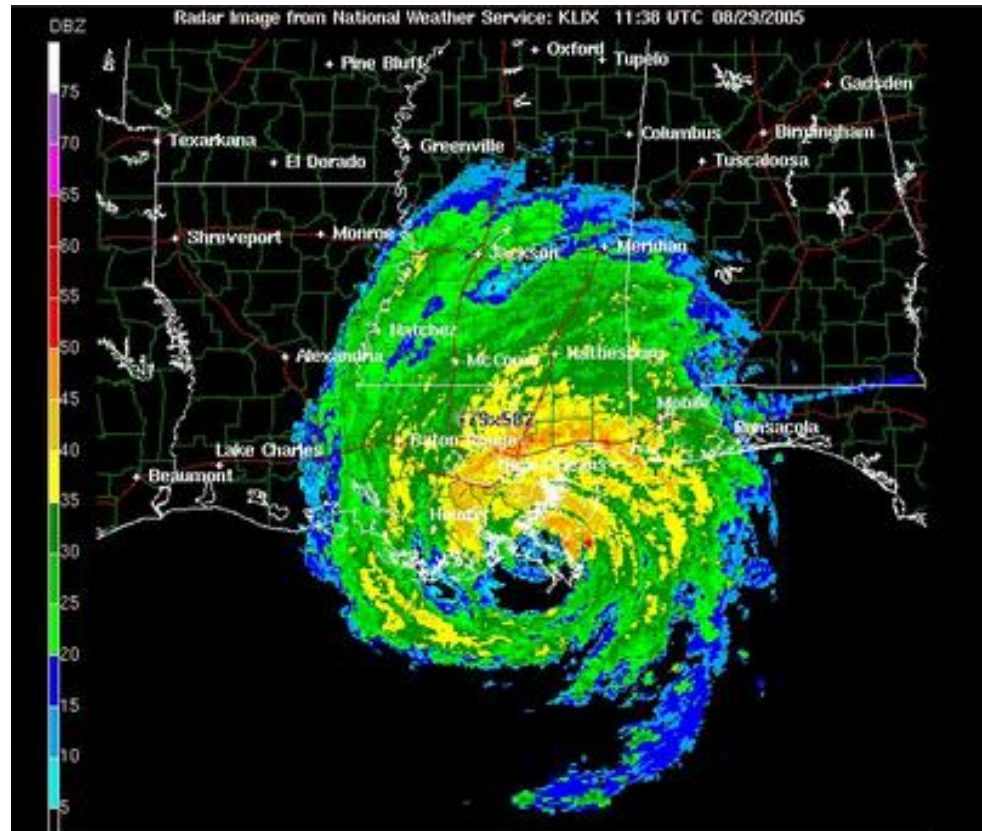
**Sun**  
Oct 12  **65°** 53°  
CHANCE OF RAIN: 0% WIND: ENE at 7 mph  
Mostly Sunny [Details](#)

**Mon**  
Oct 13  **72°** 64°  
CHANCE OF RAIN: 50% WIND: SSE at 9 mph  
Showers [Details](#)

**Tue**  
Oct 14  **77°** 65°  
CHANCE OF RAIN: 10% WIND: SSE at 13 mph  
Partly Cloudy [Details](#)

**Wed**  
Oct 15  **73°** 56°  
CHANCE OF RAIN: 70% WIND: SSE at 14 mph  
Light Rain [Details](#)

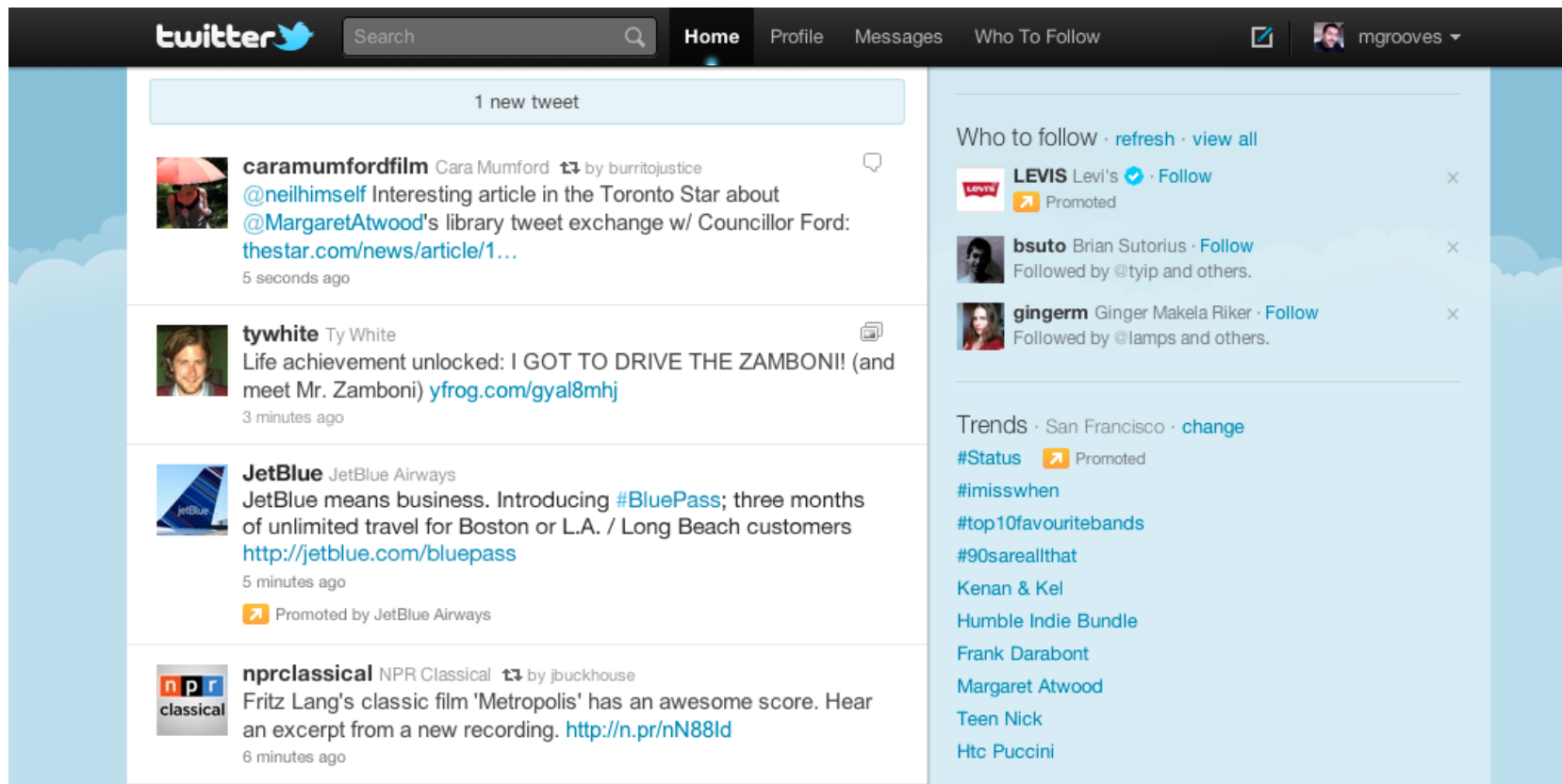
**Thu**  
Oct 16  **67°** 54°  
CHANCE OF RAIN: 20% WIND: WSW at 11 mph  
Partly Cloudy [Details](#)



● Other examples of unstructured data?

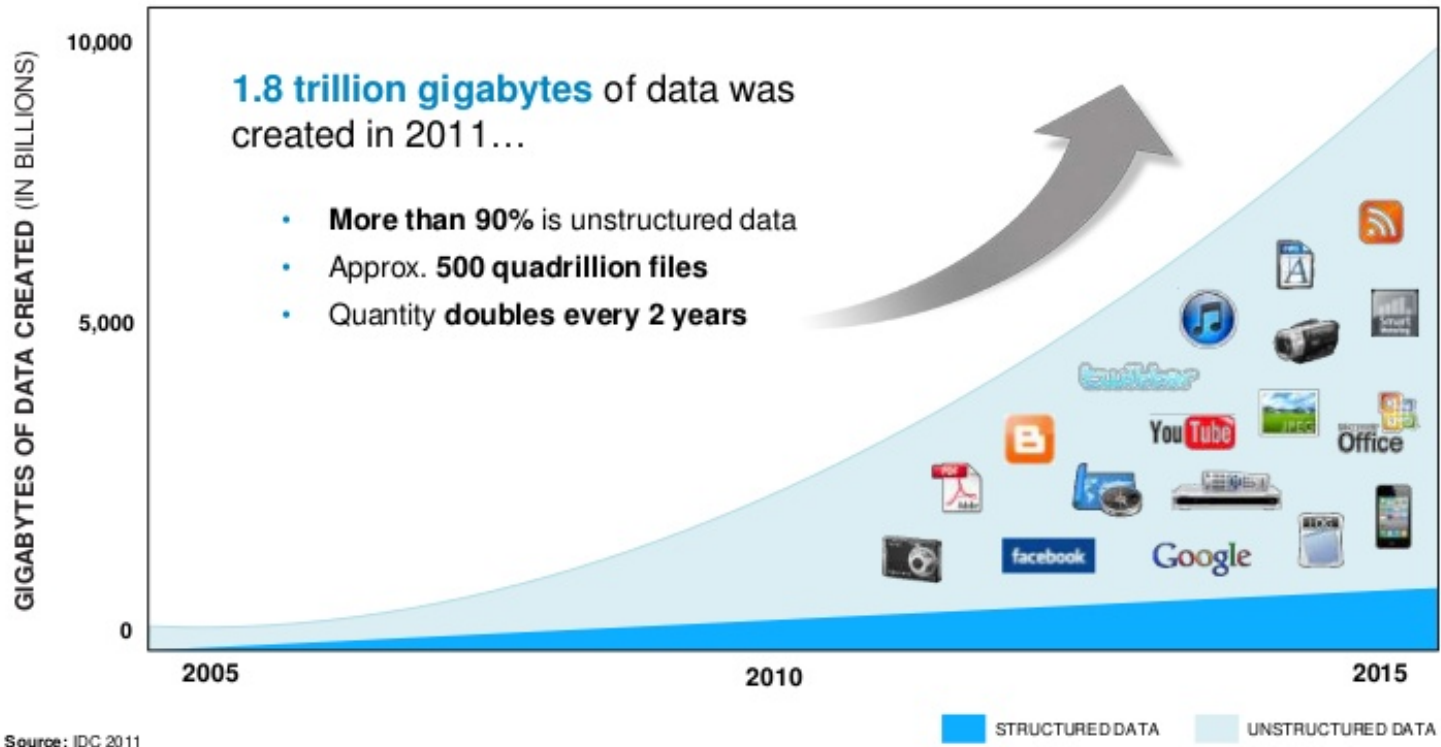
# Twitter Tweets

- What is the structure data and what is unstructured?

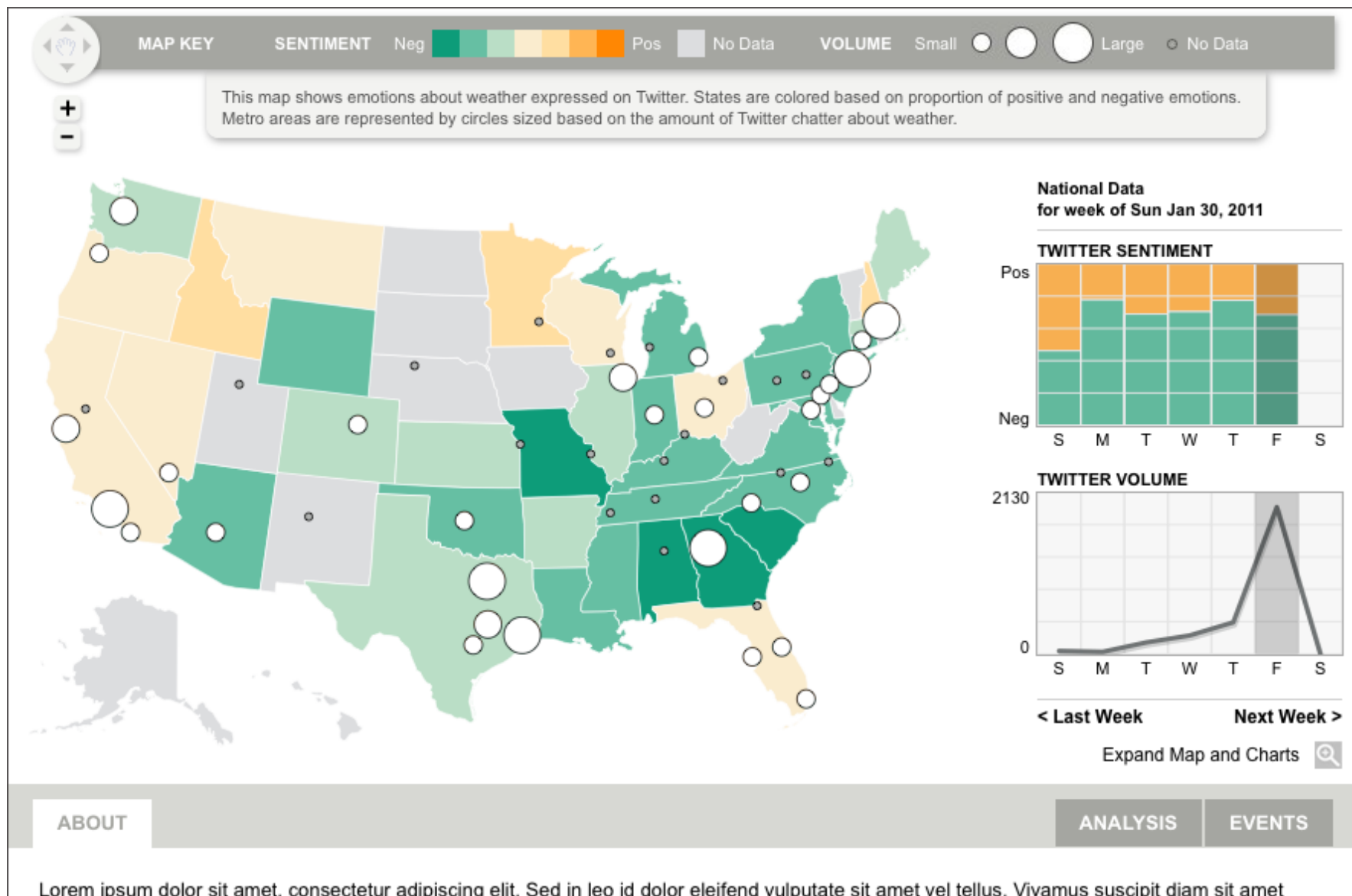


<http://www.cnet.com/news/twitter-starts-injecting-paid-tweets-into-the-stream/>

# Explosive Data Growth



# Twitter Sentiment Analysis



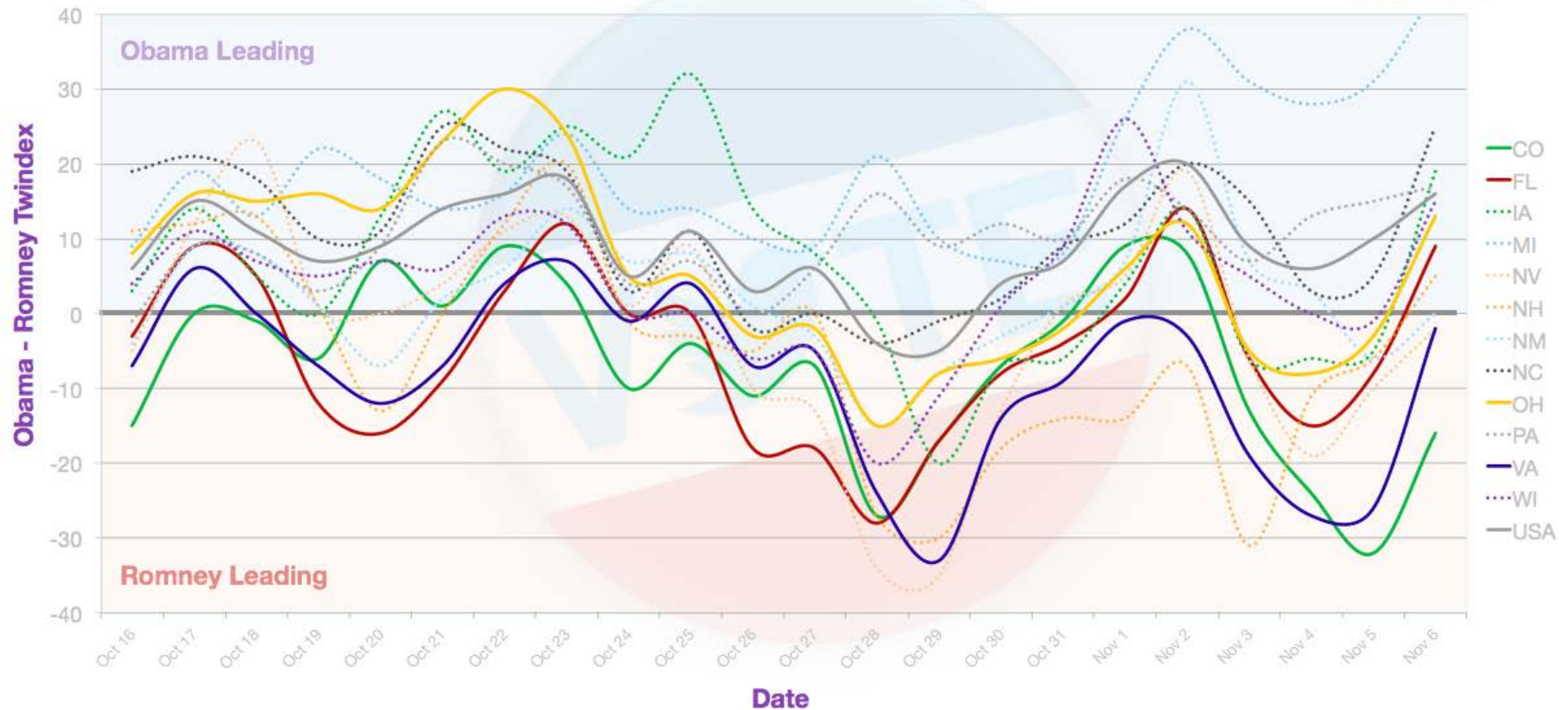
<http://www.dialogueearth.org/2011/05/13/hope-for-human-sentiment-analysis-coding/>

# Twitter Political Index: The Swing States

Net difference in @BarackObama vs. @MittRomney #Twindex scores in @USAToday- and @Gallup-defined “swing states.”  
 October 16, 2012 to November 6, 2012 (partial day)

Follow @gov for more about government & politics on Twitter.

ANALYTICS BY **TOPSY**



<http://mashable.com/2012/11/06/twitter-sentiment-romney-obama/>

# Yelp Reviews for Poi Dog Snack Shop

“Positive”  
Word Library



**Gabby M.**  
Philadelphia, PA  
👥 17 friends  
★ 88 reviews

★★★★☆ 7/11/2014

Sooo good! The pork is **amazingly** flavorful and tender! The staff is very friendly. I wish they came around University City more often. Cannot wait to have it again!



**Sean P.**  
Philadelphia, PA  
👥 25 friends  
★ 12 reviews

★★★★☆ 10/10/2013

By far my favorite food truck at Temple.

I've eaten here numerous times. They operate an odd schedule, moving to different locations out the city. I haven't pinned down exactly which days they're on campus, but I crack a huge smile every time I see their little cart.

I've never had a bad meal at Poi Dog. The tacos are superb, katsu chicken quite tasty, and even the spam musabi, which I was very hesitant about, was a **wonderful** surprise. The mochi nori chicken is among the **best** meals that I've ever had from a food truck. It's crunchy and sweet with nuanced spices that I've yet to pin down.

Great

Fantastic

Best

Wonderful

Outstanding

Amazing

➔ Share review

👤 Compliment

💬 Send message

❤ Follow Sean P.

A sentiment analysis is not an easy task.

Your class was **terrific**

Your class was **terrifically bad**

Your class was **awfully good**

I'd **like** to tell you that your  
class was **great**, but I **can't**!



## How we'll do a sentiment analysis



Retrieve Tweets  
using a spreadsheet  
add-in in Google  
Drive

Copy the tweets  
from Google  
Drive to a special  
Excel workbook

Excel classifies  
the Tweets as  
positive or  
negative