



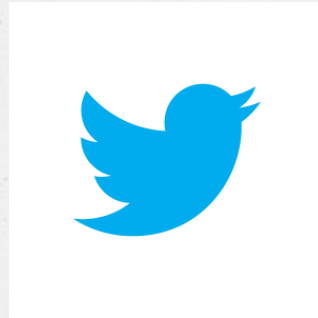
Visualizing the Viralization of a Tweet

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Introduction to Data Science

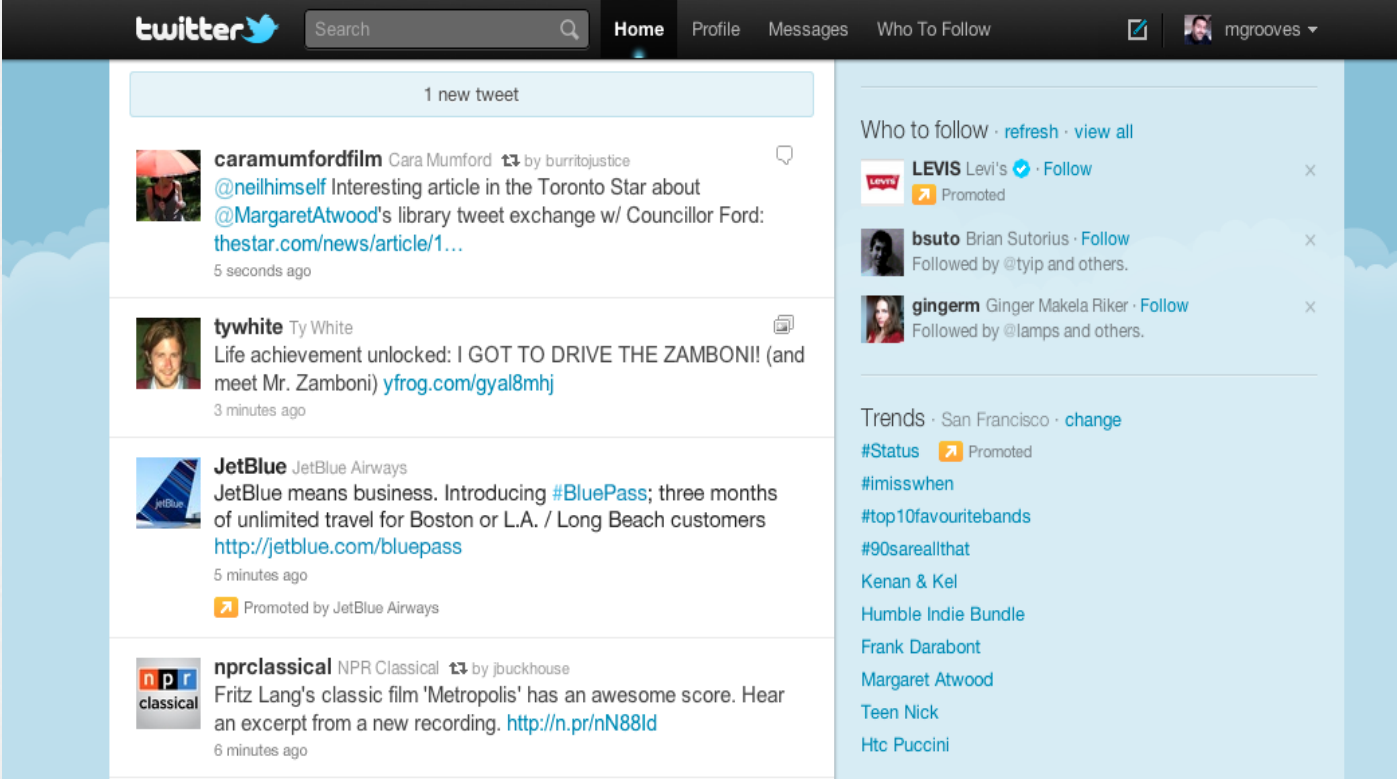
June 4, 2013

The Data



- o Public tweets
- o Data (tweets) drawn via Twitter API
- o Data is filtered via hashtags
- o Data is live stream from ongoing Twitter activity

Informative data regarding trends and activities on Twitter



The screenshot displays the Twitter homepage interface. At the top, there is a navigation bar with the Twitter logo, a search bar, and links for Home, Profile, Messages, and Who To Follow. The user's profile picture and name 'mgrooves' are visible on the right.

The main feed shows a list of tweets. The first tweet is from 'caramumfordfilm' (Cara Mumford) retweeted by 'burritojustice', mentioning an article in the Toronto Star about Margaret Atwood's library tweet exchange with Councillor Ford. The second tweet is from 'tywhite' (Ty White) celebrating a life achievement of driving a Zamboni. The third tweet is from 'JetBlue' (JetBlue Airways) promoting the #BluePass program. The fourth tweet is from 'nprclassical' (NPR Classical) retweeted by 'jbuckhouse', mentioning Fritz Lang's film 'Metropolis'.

On the right sidebar, there is a 'Who to follow' section with a list of suggested accounts: LEVIS, bsuto, and gingerm. Below this is a 'Trends' section for San Francisco, listing various hashtags and topics like #Status, #imisswhen, #top10favouritebands, #90sareallthat, Kenan & Kel, Humble Indie Bundle, Frank Darabont, Margaret Atwood, Teen Nick, and Htc Puccini.

Interpreting the data

Browser tabs: (1) INFO480 Aces - Messa... dorm.danopia.net/tweets

Address bar: dorm.danopia.net/tweets

Navigation icons: Suggested Sites, Welcome to Facebo..., IPT, Whatbox, Index, TED Blog | 100 Webs..., Tap, Web Slice Gallery, Imported From IE, Logic Self-Taught: A..., Where to Eat and Dri..., Other bookmarks

Terminal window (daniel@laptop: ~/Code/NodeJS/info480aces):

```
Initial recording window is set to:
X:0 Y:0 Width:1920 Height:1080
Adjusted recording window is set to:
X:0 Y:4 Width:1920 Height:1072
Your window manager appears to be GNOME Shell

Buffer size adjusted to 4096 from 4096 frames.
Reverting to full screen capture at every frame.
To disable this check run with --no-w-check
(though that is not advised, since it will probably produce
faulty results).

Initializing...
Opened PCM device default.
Recording on device default is set to:
1 channels at 22050Hz
Capturing!
```

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Goal

- o Identify and separate OT's and RT's
- o Filter for top trending hashtags
- o Identify top 5 tweets
- o Visualize simultaneously the OT's and the rise in their popularity (RT's and Favorites)
- o Graphically display the stream of tweets (OT's, RT's and favorites)
- o Visualize the tweets in different methods in a single display

Tools Used

- JavaScript
- D3 library (for visualization)
- Twitter API



Demo

Live Visualization