# **CS 5764 Information Visualization TweetLion Team Final Presentation**

#### Presenters:

Tong Zhang, Liuqing Li {ztong, liuqing} @vt.edu

Instructor:

Dr. Chris North

Virginia Polytechnic Institute and State University
Blacksburg, VA, 24061
December 7, 2016



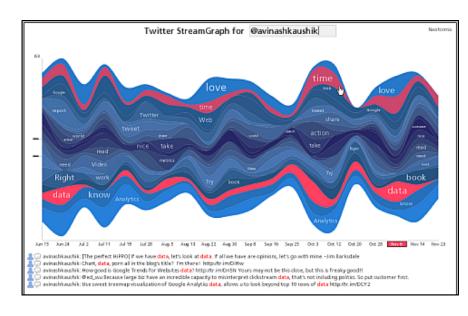
## **Outline**

- Motivation
- Dataset
- Architecture
- Demo

- Conclude what we learned
- Focus on social media (e.g. twitter)
  - Temporal Distribution
  - Spatial Distribution
  - Sentiment Distribution
  - Hot-spot Issues
  - Key Users
- Extensibility
  - Dataset
  - Algorithm



- Conclude what we learned
- Focus on social media (e.g. twitter)
  - Temporal Distribution
  - Spatial Distribution
  - Sentiment Distribution
  - Hot-spot Issues
  - Key Users
- Extensibility
  - Dataset
  - Algorithm



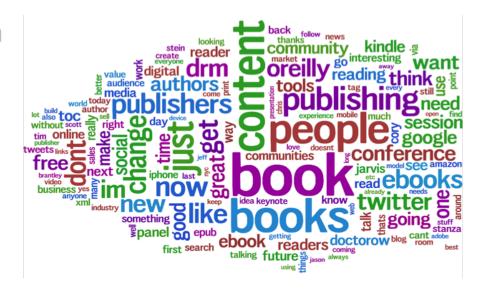
- Conclude what we learned
- Focus on social media (e.g. twitter)
  - Temporal Distribution
  - Spatial Distribution
  - Sentiment Distribution
  - Hot-spot Issues
  - Key Users
- Extensibility
  - Dataset
  - Algorithm



- Conclude what we learned
- Focus on social media (e.g. twitter)
  - Temporal Distribution
  - Spatial Distribution
  - Sentiment Distribution
  - Hot-spot Issues
  - Key Users
- Extensibility
  - Dataset
  - Algorithm



- Conclude what we learned
- Focus on social media (e.g. twitter)
  - Temporal Distribution
  - Spatial Distribution
  - Sentiment Distribution
  - Hot-spot Issues
  - Key Users
- Extensibility
  - Dataset
  - Algorithm



- Conclude what we learned
- Focus on social media (e.g. twitter)
  - Temporal Distribution
  - Spatial Distribution
  - Sentiment Distribution
  - Hot-spot Issues
  - Key Users
- Extensibility
  - Dataset
  - Algorithm



#### **Dataset**

- Description
  - Tweet Collection (Keyword: flood)
  - Duration: 10/01/2016 10/05/2016
  - # of records: 75,432 records
- Table
  - Relevant Attributes
    - created\_time (temporal distribution)
    - location (spatial distribution, fake data)
    - neg\_value, neu\_value, pos\_value (sentiment distribution)
    - text (hot-spot Issues)
    - screen\_name, mention\_name (key users)

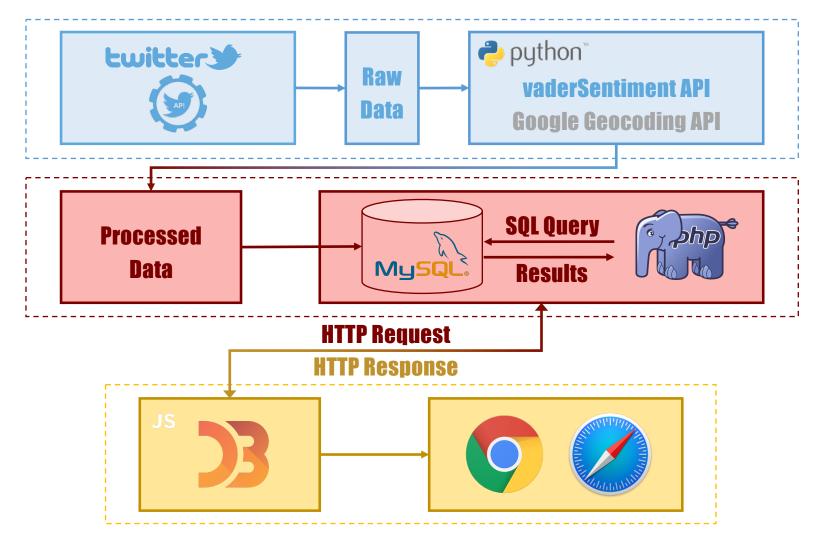


# **Dataset**

#### • Data Fragment

ID	created_time	user_id	screen_name	follower_count	friends_count	retweet_count	hashtag	mention_name	location
1	10/5/16 4:00	783517294861422593	CatherineDeWald	575	330	1009			NH
2	10/5/16 4:00	783517237256814592	bethums	9	55	0		_trapdoorspider	AZ
3	10/5/16 4:00	783517218307006464	AlisahDW93_	553	203	23			KS
4	10/5/16 4:00	783517210002227204	tgten	7881	72	0	telangana, flood		OR
5	10/5/16 4:00	783517189932474368	AJStream	196522	1918	5			VA
6	10/5/16 4:00	783517177198575617	KellyBoyWonder	1261	3375	0			MP
7	10/5/16 4:00	783517176485515265	_Lauren_Kinard_	344	237	1009			AK
8	10/5/16 4:00	783517176028340228	liss_flood	1093	1496	3923			TX
9	10/5/16 4:00	783517154129940480	maceyharrill	355	271	1009			PA
10	10/5/16 4:00	783517121716314114	kelsay_say	596	659	1009			AR
11	10/5/16 4:00	783517117542981632	Icecluther	9	45	0		jillytowns	NJ
12	10/5/16 4:00	783517068679344128	cmhwillis1	384	395	1			MT
13	10/5/16 3:59	783517047854596097	aristway27	1238	2104	3			CA
14	10/5/16 3:59	783517046046879745	liss_flood	1093	1496	1884			PW
15	10/5/16 3:59	783517032646074370	aristway27	1238	2104	3			МН
16	10/5/16 3:59	783517026249764865	alexand94767631	753	972	5			WI
17	10/5/16 3:59	783517013461311490	gabrielmartinez	844	1990	0	NowPlaying, SRV		IL
18	10/5/16 3:59	783517005274091521	ciawaabea	458	322	137			ОК
19	10/5/16 3:59	783516997334204416	The_One242	564	2004	71			AS
20	10/5/16 3:59	783516987976773632	CountyofMaui	8325	453	0			SD

### **Architecture**





10

#### Demo

