



Monitoring the World through **Social Media**

CHOWDARI ADITYA REDDY

HIYEON KIM

NICOLA LEA LIBERA

RUTA HARESHBHAI BAKHDA

SHAOUR HAIDER



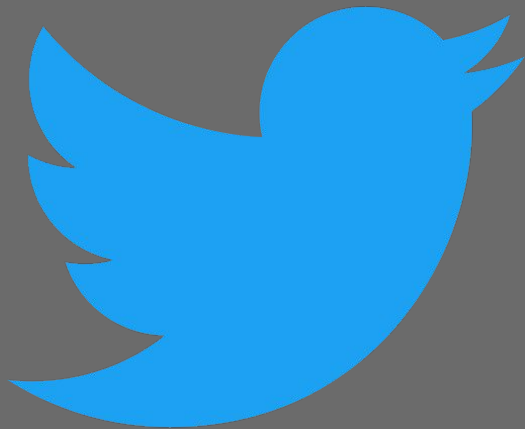
The Idea

To show what's going on
in the world
concerning **disasters**,
through **Twitter**.



Why?

Abundant real-time information



- ~350k/min
- ~500m/day
- ~326M Monthly Active Users



Why?



Adolph
@Adolph_89

Follow

Avoid South Africa drive, there is a congestion of [#Traffic](#) between Angola Crescent and South Africa Drive [#Floods](#) [#CosmoCity](#), this taxi has been trapped for the past 1 hour with passengers inside



7:55 AM - 14 Jan 2019 from Randburg, South Africa



leanne kirkwood
@UK_HX

Follow

[#Pabuk](#) [#pabukupdates](#) It's wild here!



8:07 PM - 4 Jan 2019



Livia Benisty
@LiviaBenisty

Follow

On Koh Samui, confined to room for cyclone. Terrace is sheltered, set back from rain. Went outside to take it in. Turned round, saw snake trying to enter room. Was dealing with interruption to vacay, & confinement to bedroom. This, however, is not ok. [#sendhelp](#) [#Pabuk](#)

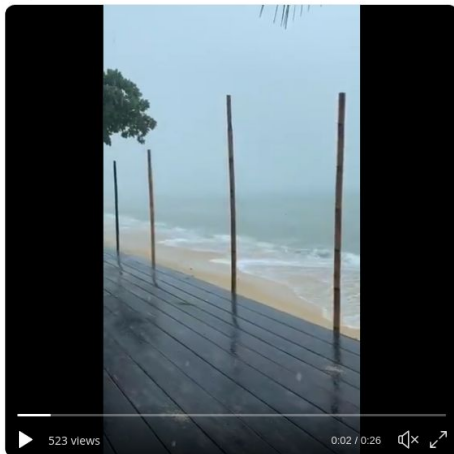
8:58 AM - 4 Jan 2019



BoThaoUrahe
@bothao

Follow

Heavy rain and windy on [#KohSamui](#) as [#pabuk](#) passes. As hard as it is don't venture out. Going to read all day. Grateful everyone is ok but thinking of local families who are impacted.



523 views

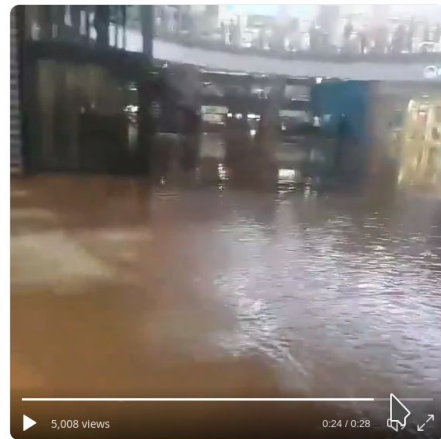
0:02 / 0:26



Mme a Masakona
@FloMasebe

Follow

Water, water, everywhere! [#Floods](#)



4:44 AM - 12 Jan 2019



Glenna Milberg
@GlennaWPLG

Follow

Three months after the [#hurricane](#), these homes on 14th St. remain literally broken, toppled off their foundations... [#MexicoBeach](#)



1:46 PM - 9 Jan 2019 from City of Mexico Beach

Tweets can be a good indicator for disasters!

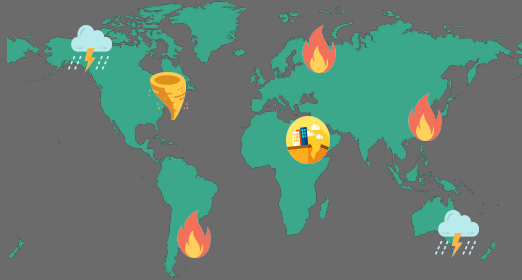


Pipeline

Crawler



Classifier



Web Interface



Indexer



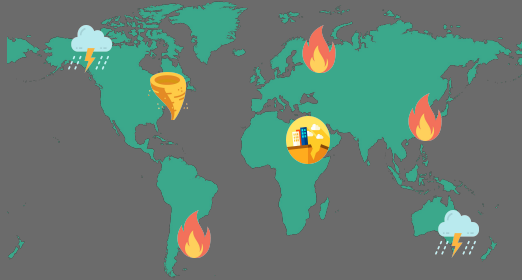
Pipeline

- **tweepy**
: python
streaming API
- **geo-enabled
tweets**

Crawler



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Indexer



Pipeline

Crawler

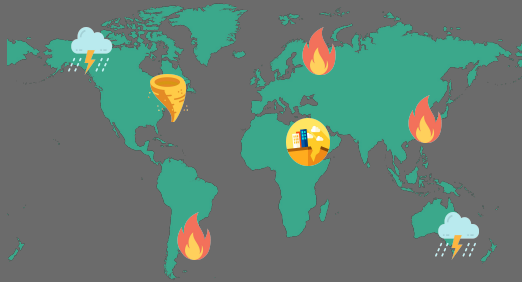
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Classifier



- **scikit**
- **SVM classifier**
- **nltk vader**
- **Wiki full dump**



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- **elasticsearch**
: fast, scalable
search engine
- **python API in
FLASK**
- **id, user, date,
place, category, ...**

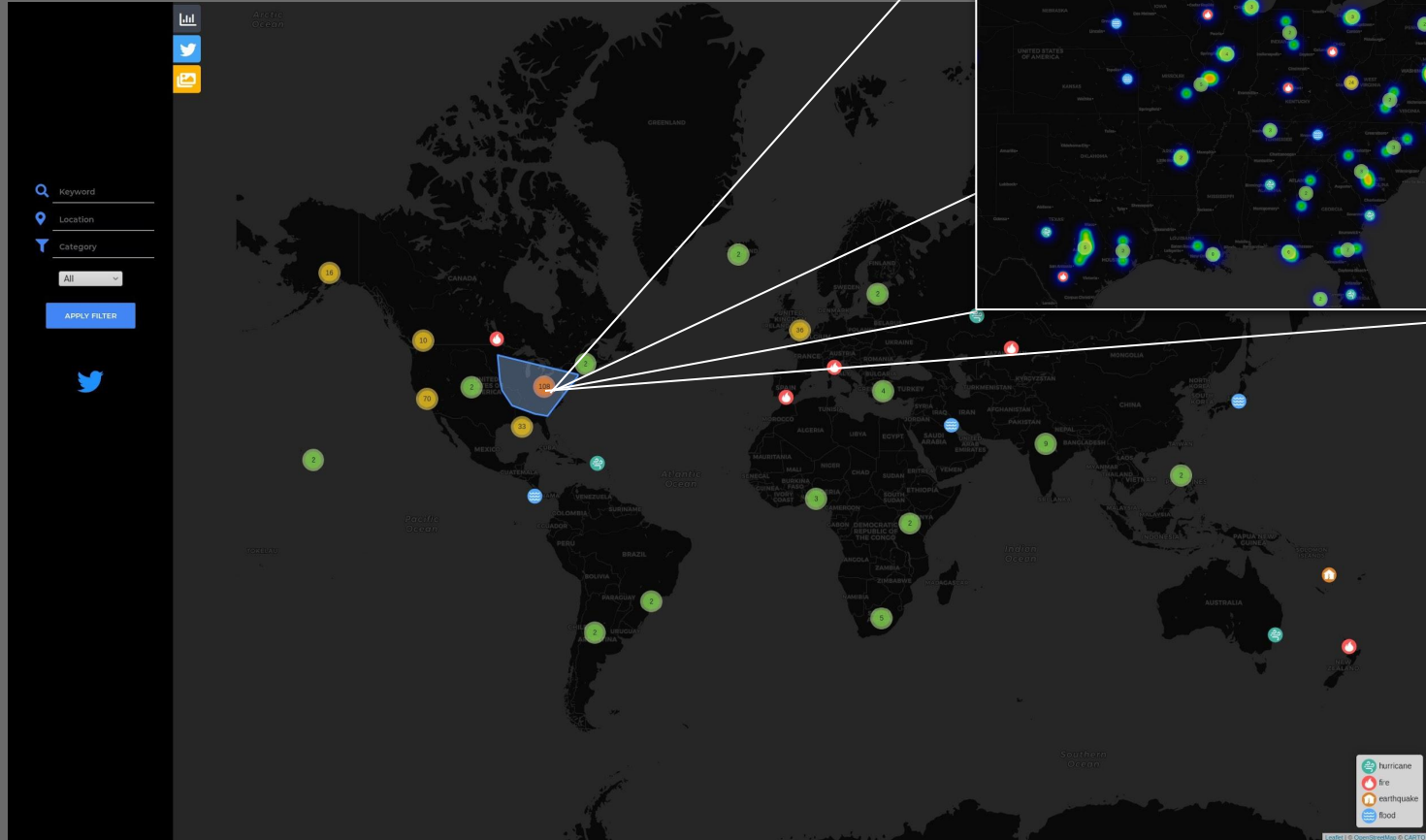


Web Interface

Indexer

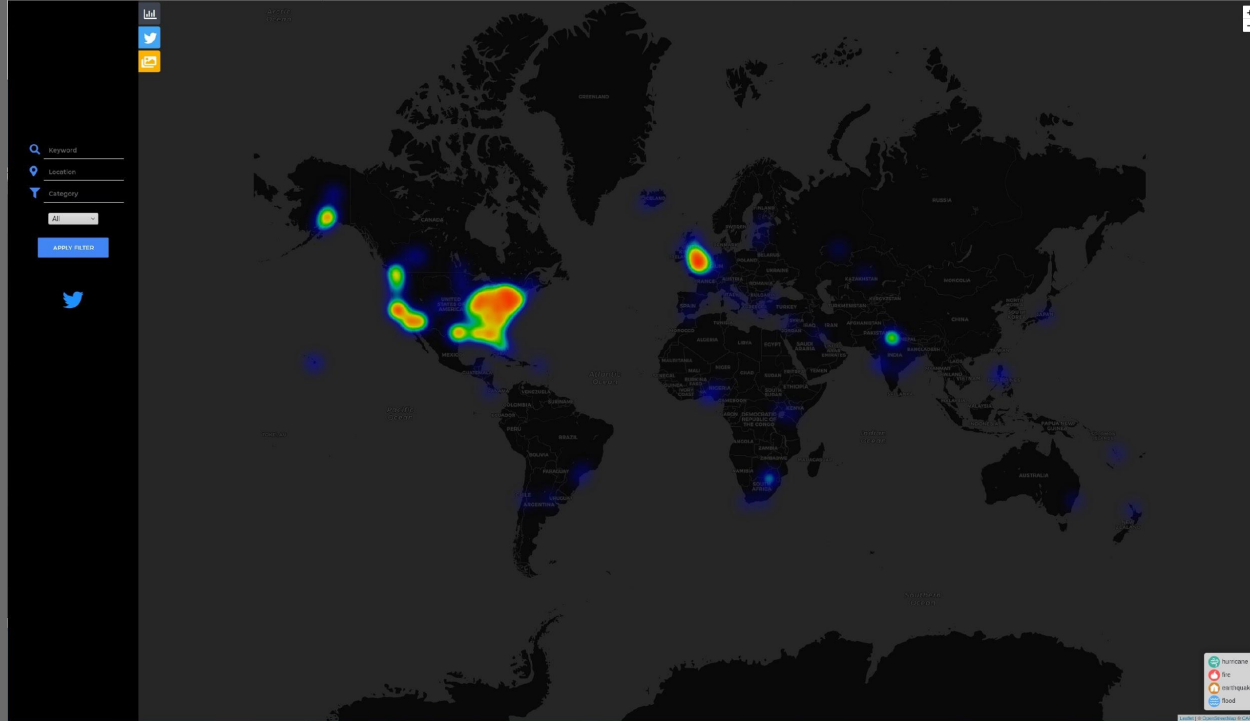


Web Interface





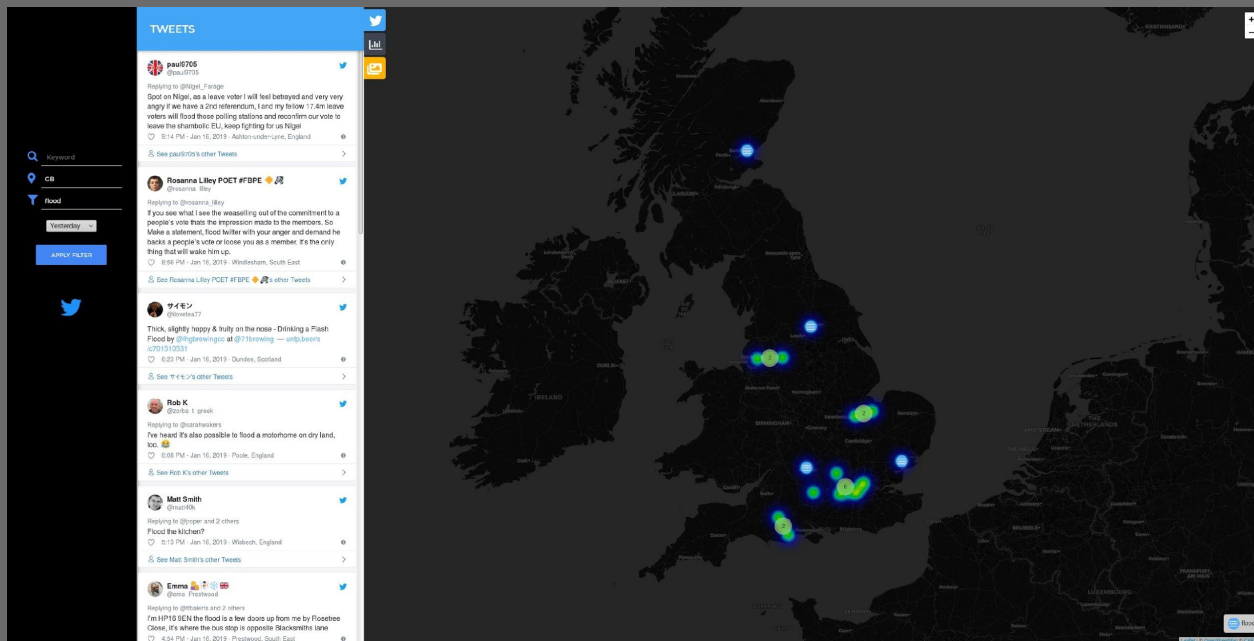
Web Interface



heatmap



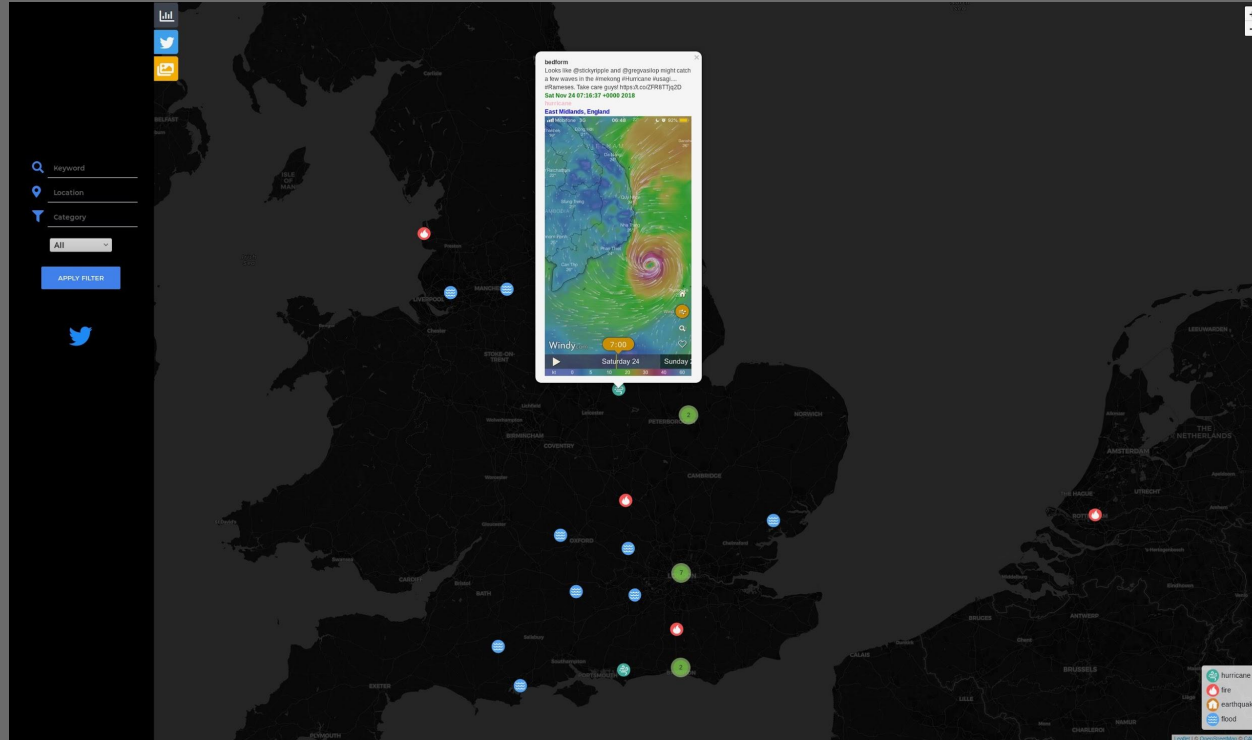
Web Interface



filter & tweet displayer



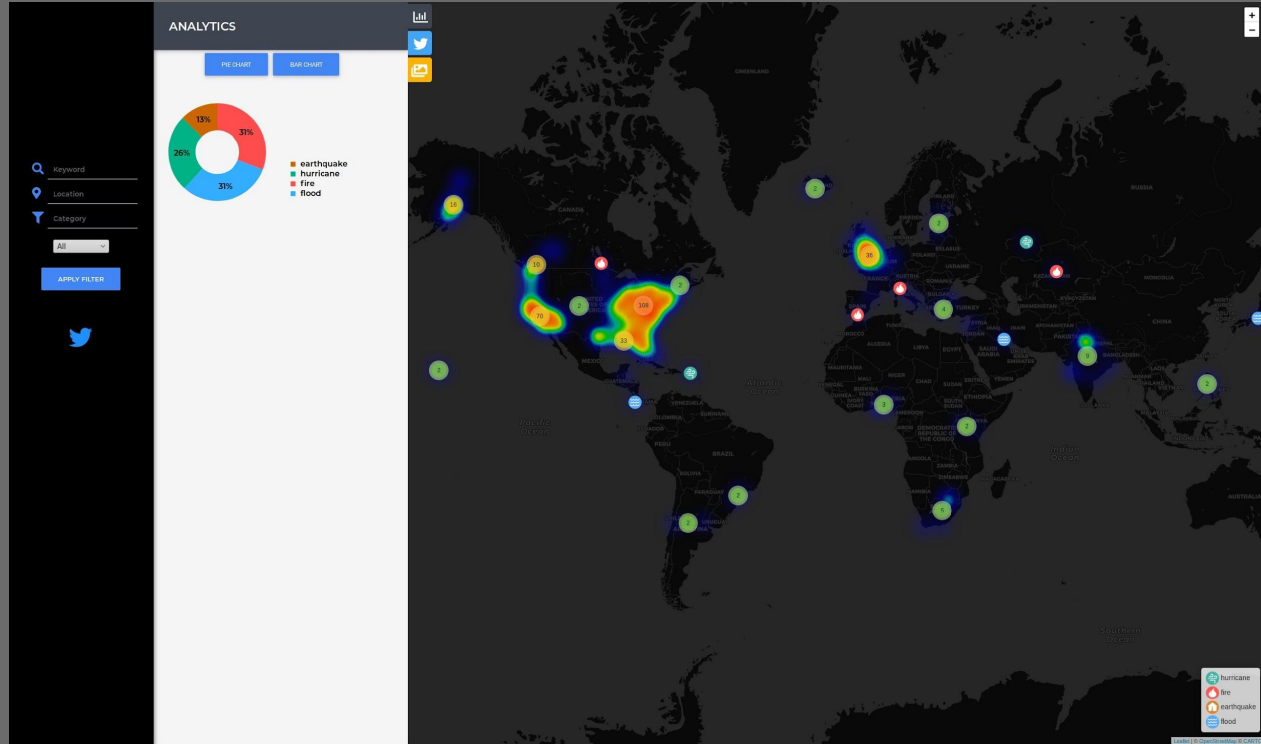
Web Interface



tweet popups



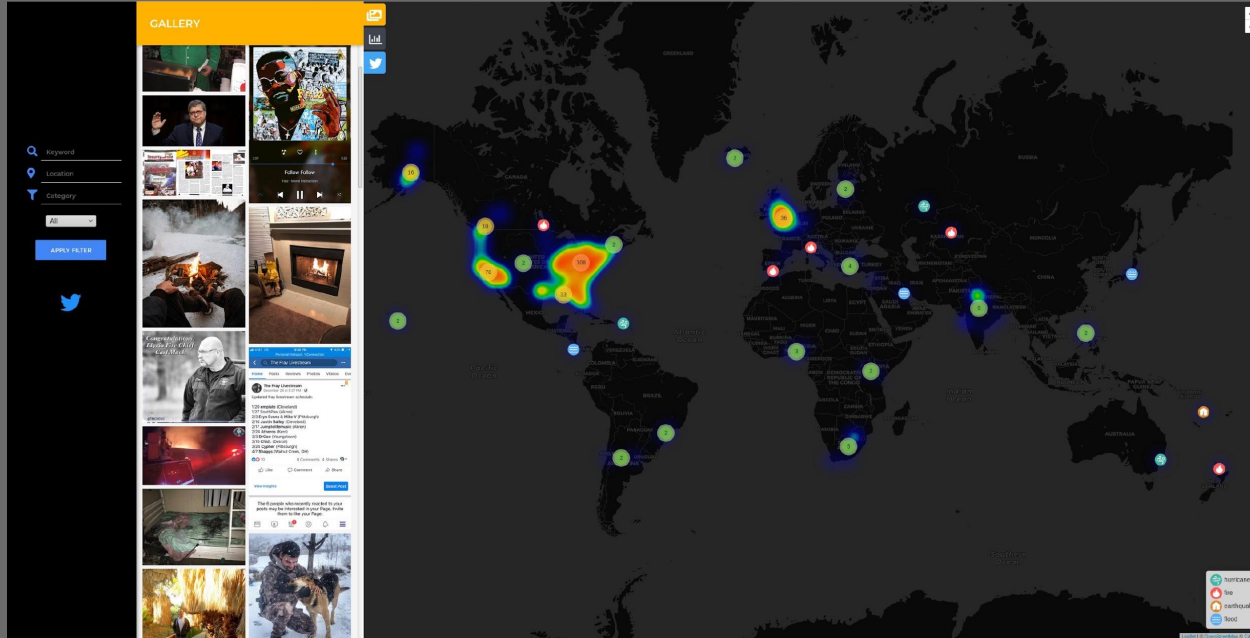
Web Interface



Analytics



Web Interface



Gallery



THAT'S IT!