

CMSC 601 – Research Skills

# Analysis of Twitter Data



NIKHIL PURANIK

# History of My Blog

2005:

art! ideas! poetry!  
tech! architecture!  
business! science!  
internet!



2006:

google! yahoo!  
techcrunch! flickr!  
youtube! web 2.0!  
blogs!



2007:

twitter! twitter!  
twitter! twitter!  
twitter! twitter!  
twitter!



©hugh

## *A Bird's Eye View:*



- ❏ Twitter is a micro blogging website.
- ❏ Used by millions of people all over the world
- ❏ A big repository for real time information
- ❏ Twitter asks the question :“*what is happening?*”  
The user enters the information in 140 characters or less.
- ❏ This information can be anything , what is on user's mind, opinions about a topic, political views, reactions about events.

## Get short, timely messages from Barack Obama.



Twitter is a rich source of instantly updated information. It's easy to stay updated on an incredibly wide variety of topics. [Join today](#) and [follow @BarackObama](#).

[Sign Up](#)

Get updates via SMS by texting [follow BarackObama](#) to [40404](#) in the United States  
[Codes for other countries](#)



# BarackObama

*Verified Account*

**Name** Barack Obama  
**Location** Washington, DC  
**Web** <http://www.barack...>  
**Bio** 44th President of the United States

**702,577** following   **6,785,135** followers   **129,689** listed

**Tweets** 1,266

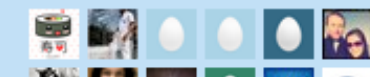
Favorites

Lists

[@BarackObama/organizing-for-america](#)

[View all](#)

Following



We need to be willing to sacrifice, but we can't sacrifice our future. We need a balanced approach to deficit reduction. <http://OFA.BO/ef>

2:08 PM Feb 26th via HootSuite

This West Wing Week: winning the future through investments in innovation and small business. <http://OFA.BO/6D8M9s>

11:26 AM Feb 25th via HootSuite

Delivering a statement on Libya from the White House at 5:15pm



Tweets – Are they really useful??



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**EmeryCatt** [#IWasTheKid](#) who preferred climbing trees than playing with dolls (:

half a minute ago via txt

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**AyyooLiz** RT [@PeteManTheThird](#): [#iwasthekid](#) who didn't know how to fit in with society.

half a minute ago via web

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**Paparazzi\_Muz3** [#Iwasthekid](#) who ran away from home

half a minute ago via ÜberSocial

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**dj\_mrstrokeit** [#iwasthekid](#) who skipped out of school with my two cousins and went walked on da highway soo erbbody cud see us... got my ass towed up...

half a minute ago via web

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**FreshManGGE** [#iwasthekid](#) watchin scary movies consistently and spooked about it lol I gotta rush

half a minute ago via Twitter for BlackBerry®

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**KosmoFoSho** [#iwasthekid](#) that would always sleep in 1st period

half a minute ago via web

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## Realtime results for snow sever

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**BrettHickman** #Indianapolis goes from 4 inches of **snow** on Friday to a **sever** thunderstorm on Sunday night.

about 1 hour ago via ÜberSocial

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**Jerm\_C** What the F... RT @KCWeather Next 24 hours: Fog, t-storms, hail, freezing rain, sleet, **snow**, sunshine. Sever... (cont) <http://deck.ly/~PQYun>

about 10 hours ago via TweetDeck

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**Wormexpert** As spring nears, check microclimates: As I write this, **snow** is predicted for later in the day and for some **sever**...

<http://bit.ly/fAEarl>

about 20 hours ago via twitterfeed

---



**1stGardening** As spring nears, check microclimates: As I write this, **snow** is predicted for later in the day and for some **sever**...

<http://bit.ly/fAEarl>

about 20 hours ago via twitterfeed

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**eileen8800** As spring nears, check microclimates: As I write this, **snow** is predicted for later in the day and for some **sever**...

<http://bit.ly/hR0muM>

about 20 hours ago via twitterfeed

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**jario9** Hey Guys Dont Forget @Pinguininja2's party is today at Sever:Sparkle Room: **Snow** forts time 9am pst

1 day ago via web

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**kimberlypabst** Supposed to get a **sever snow** storm tonight and I'm in a tube top and courts in a short sleeve. #flagstaff girls. Yah were gonna get sick..

Twitter

Facebook

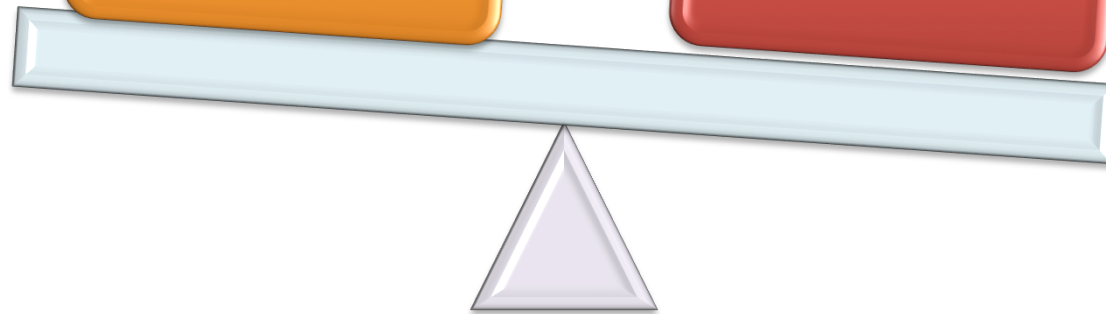
No Profile  
info.

140  
characters

Easy for Ads.

D.O.B  
required

No limits





### Nikhil Puranik ▶ Edit Profile

◀ View My

- Basic Information
- Profile Picture
- Featured People
- Education and Work
- Philosophy
- Arts and Entertainment**
- Sports
- Activities and Interests
- Contact Information

Visit your [privacy settings](#) to control who can see the information on your profile.

#### Music: What music do you like?



English Music



Romantic music



Instrumental Music



Marathi Songs



A.R. Rehman

Sandeep Khare

Shaan



English Music

#### Books: What books do you like?



The White Tiger



Marathi Novels



Dan Brown



Five Point Someone



The White Tiger



# socproject1's settings

Account

Password

Mobile

Notifications

**Profile**

Design

Picture



Choose File No file chosen

Maximum size of 700k. JPG, GIF, PNG.

Name

soc project

Enter your real name, so people you know can recognize you.

Location

Where in the world are you?

Web

http://

Have a homepage or a blog? Put the address here.  
[\(You can also add Twitter to your site here\)](#)

Bio

## Profile

This information appears on your public search results, and beyond.

It helps instantly identify you to those following you, and tells those who aren't more about you.

## Tips

Filling in your profile information will help find you on Twitter. For example, you'll likely to turn up in a Twitter search if you added your location or your real name.

Your Twitter profile picture helps instantly identify you to those following you—and those who aren't more about you.

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Research  
Problem

Twitter does not ask a user for any kind of personal information

Addressed/  
Topic of  
Interest

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Language to tweet in, time zone, tweet location, tweet media and Bio (160 char.)

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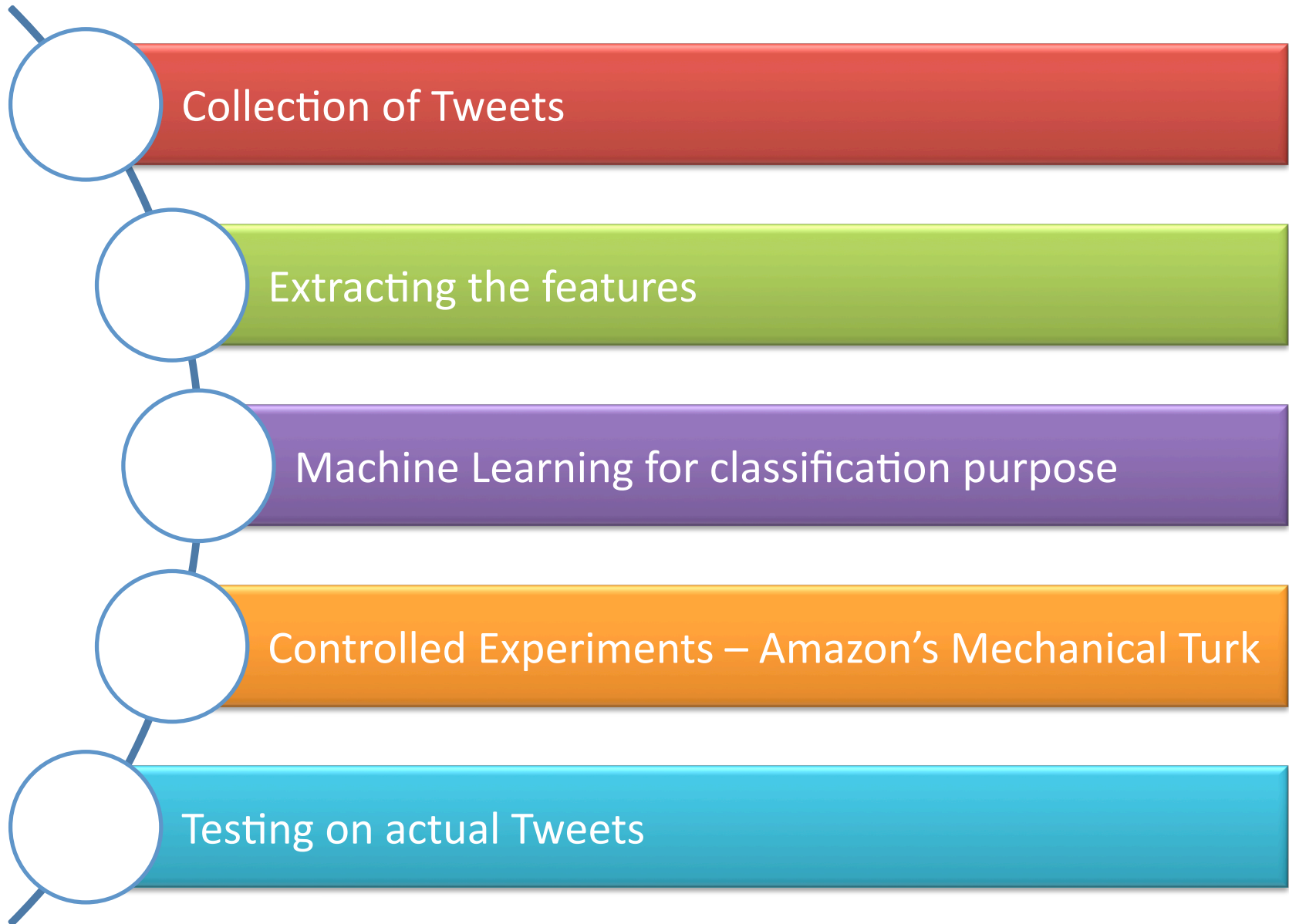
Having information such as education, philosophy, sports, activities and interests, relationship status, etc. beneficial

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Providing selective and focused advertisements

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## *Proposed Approach*



Related work :

Christopher Horn-Analysis  
and Classification of Twitter  
messages

Graz University of  
Technology

- Classification of a tweet (and user) into news, user and company and fact/opinion
- 80% accuracy with SVMs

Mike Thelwall  
et al. -  
Sentiment in  
Twitter Events

- The sentiment for each tweet was classified using an existing
- algorithm named SentiStrength which classifies a sentiment as positive or negative

Thank you!

