Twitter Sentiment Analysis on Apple & Google Products

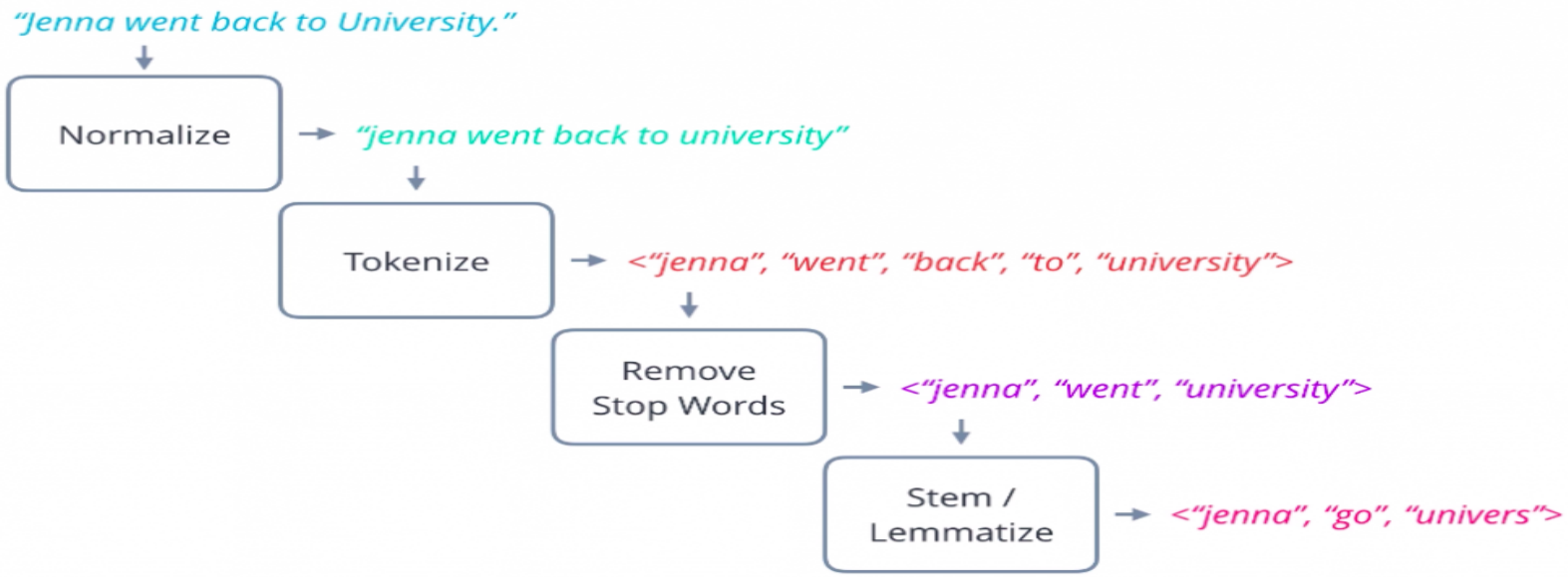
By: Hiten Patel

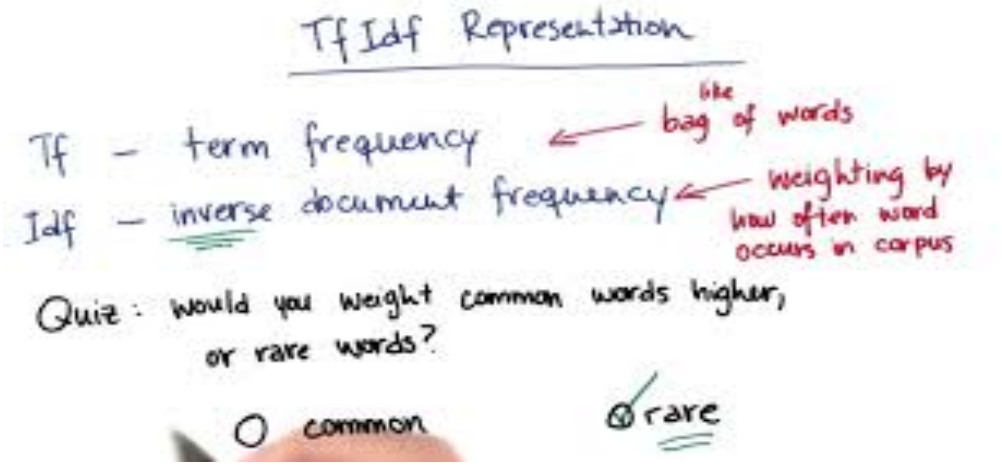
#Question

- What is Sentiment Analysis? Why do we care?
- Are we able to build a successful model ?
- If so, how can Apple or Google use this to their business advantage?

#Process

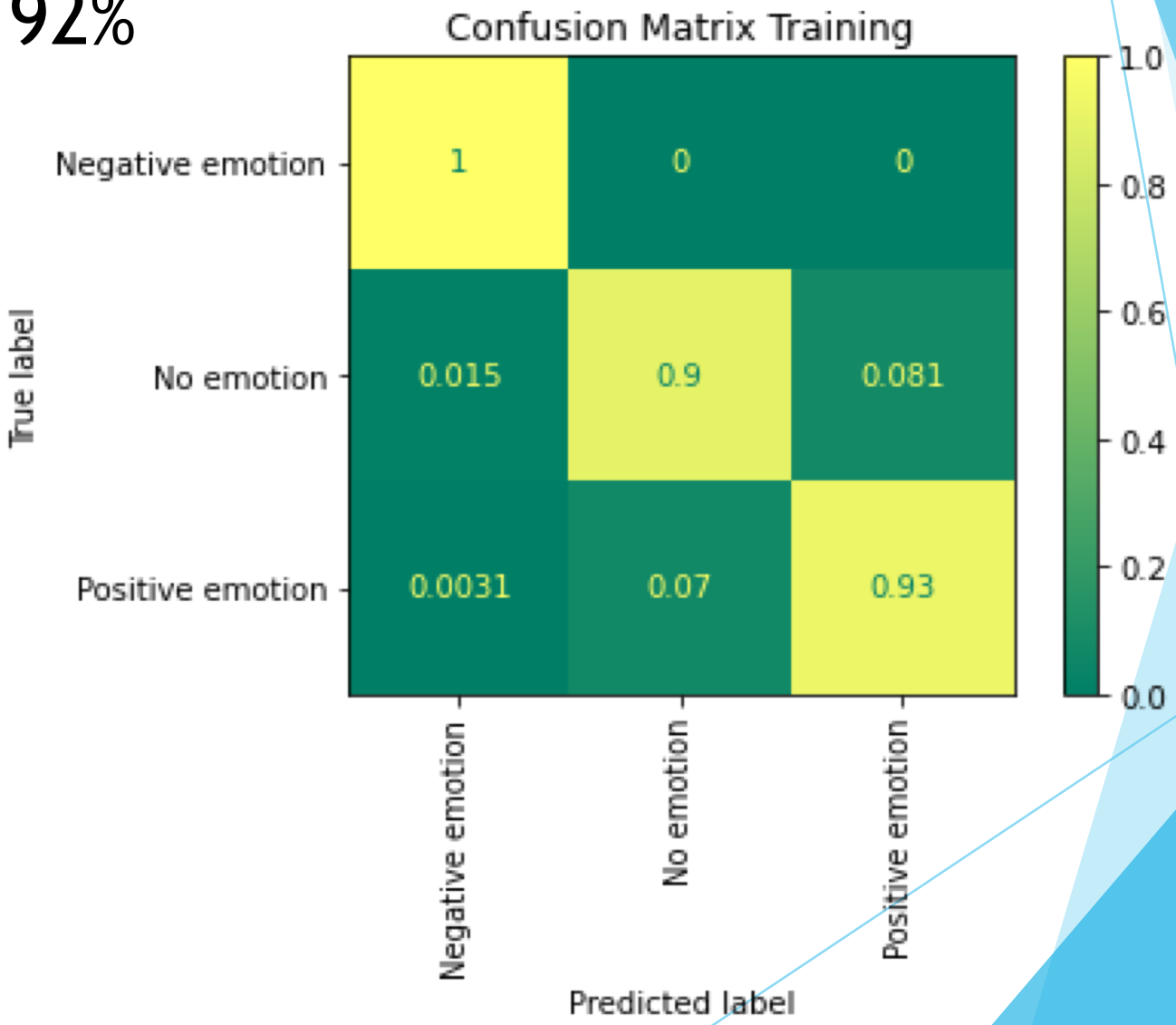
- The data comes from Crowdflower contains over 9,000 tweets





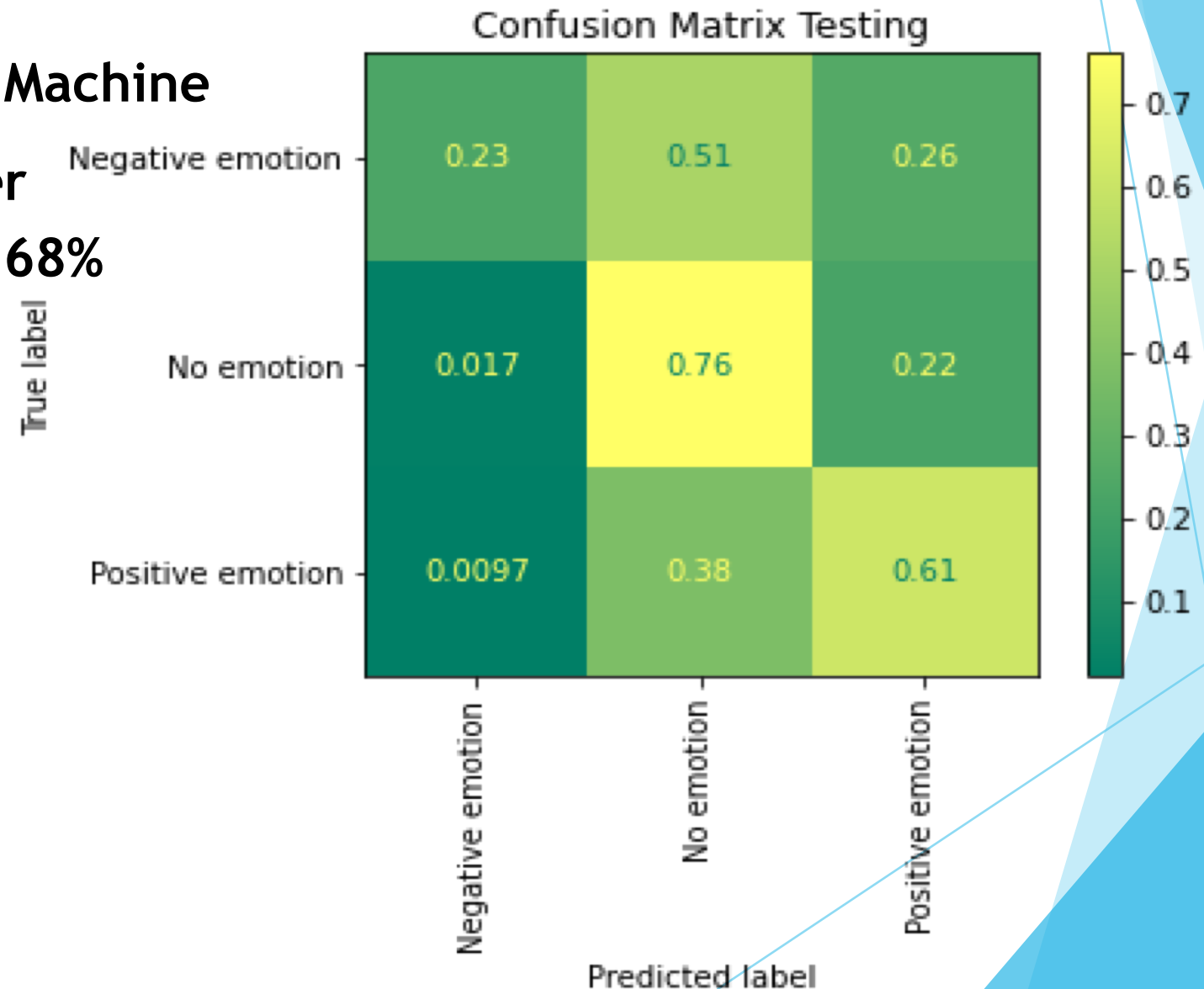
#Training Model

- **Accuracy** Rate: 92%

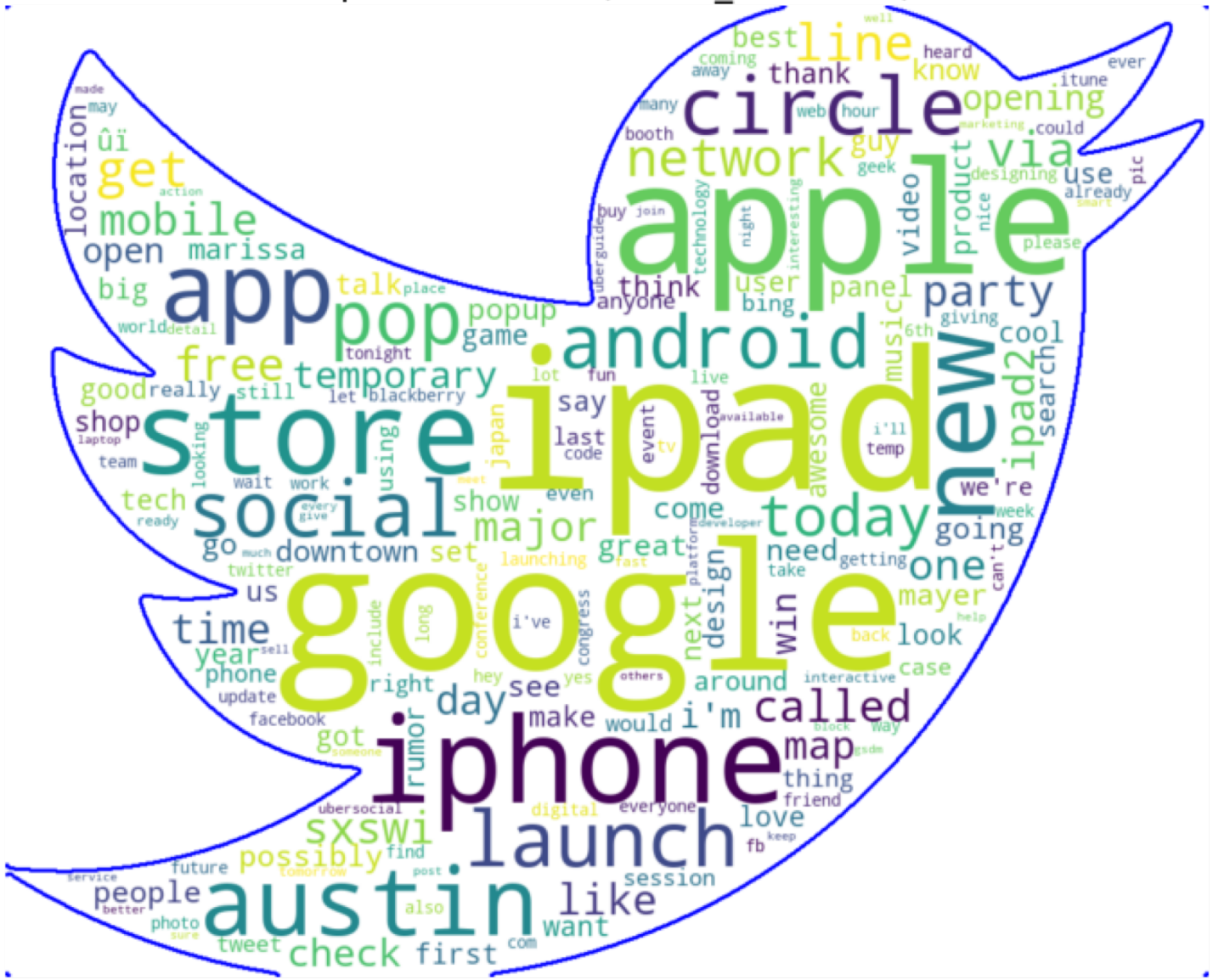


#Testing Model

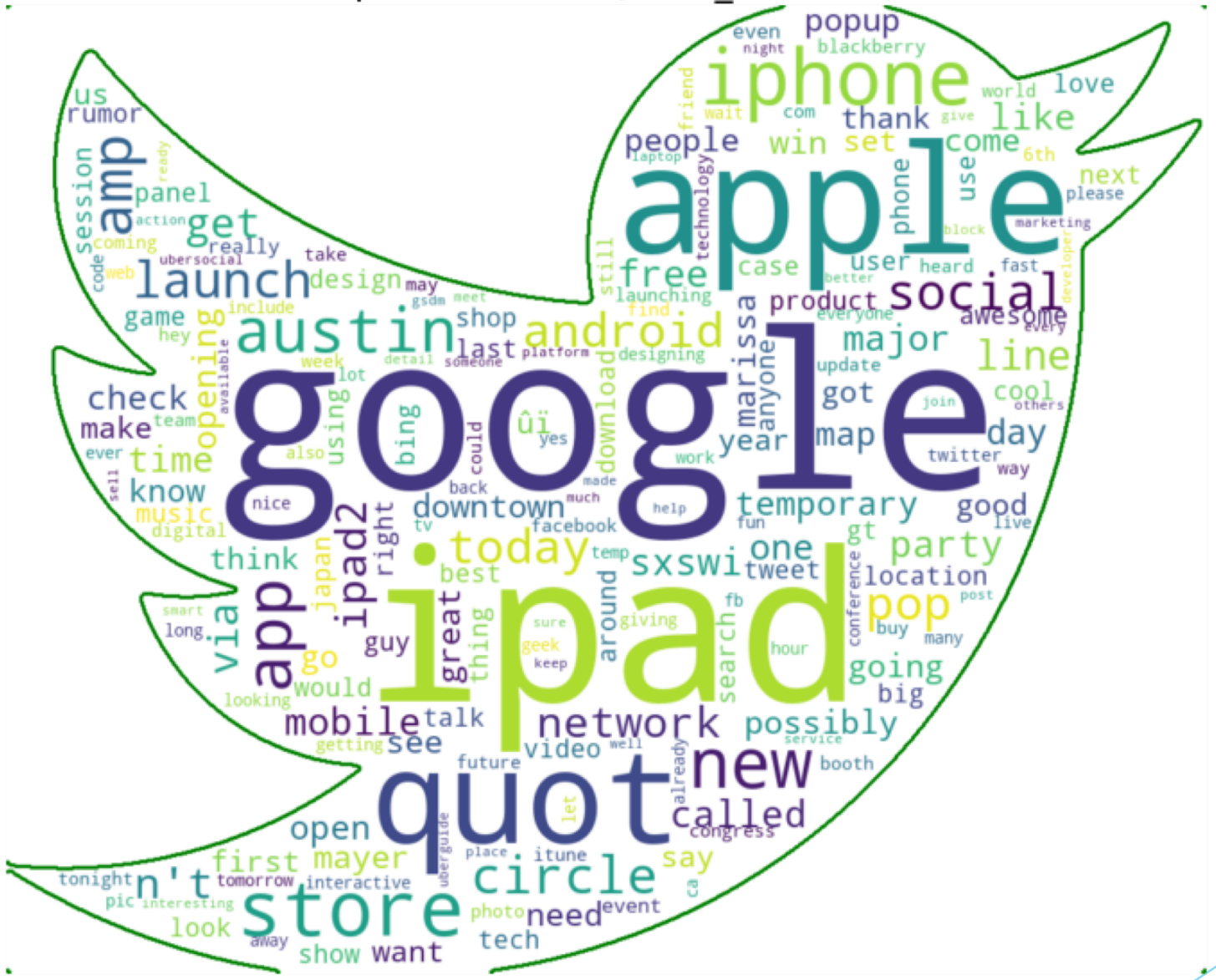
- Support Vector Machine
- Tf-Idf Vectorizer
- Accuracy Rate: 68%



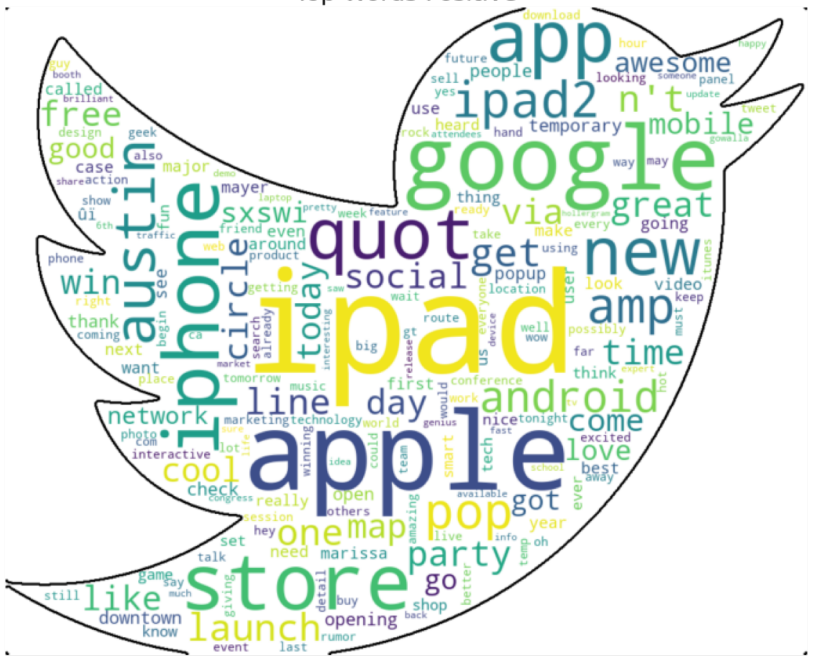
Top Words Used (tweet_tokenizer)



Top Words Used (word_tokenize)

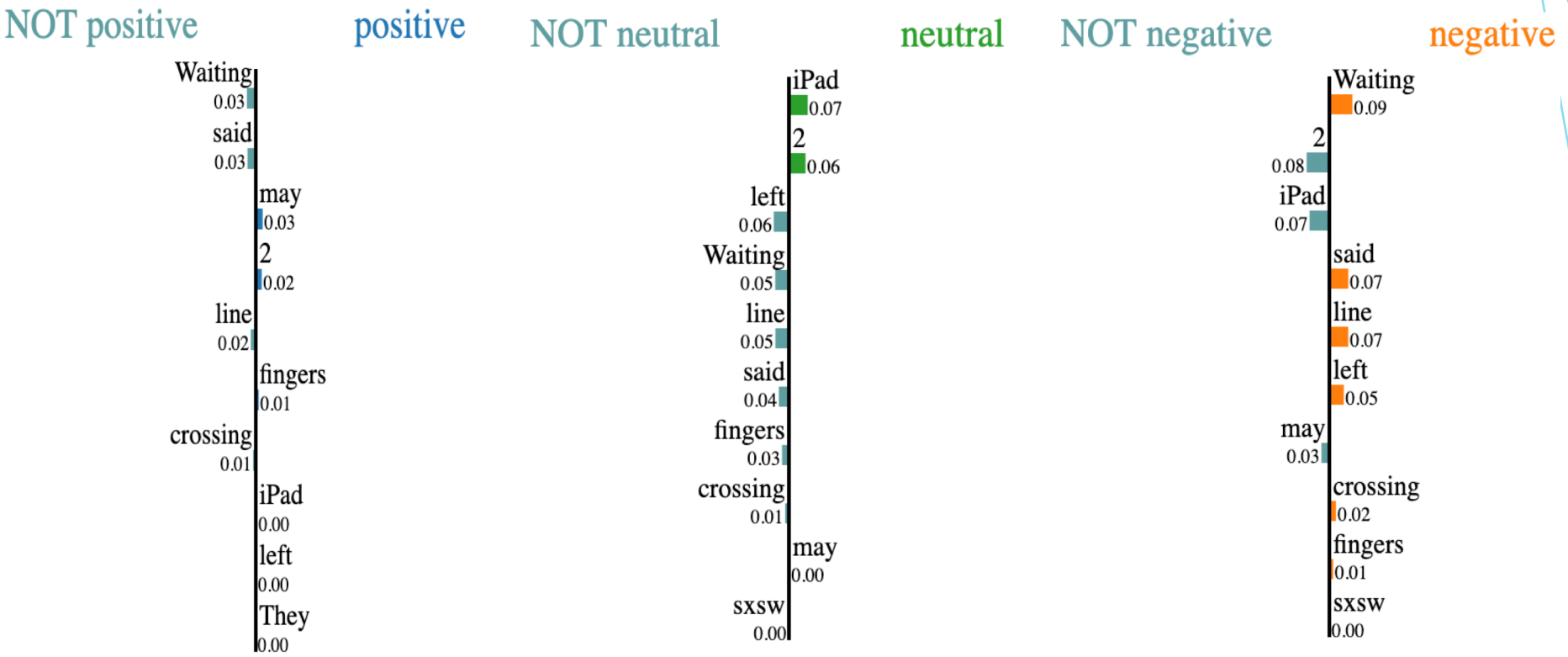


Top Words Positive

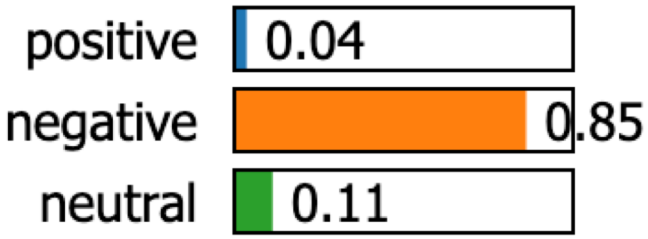

app
google
ipad
quot
apple
iphone
new
store
ipad2
n't
awesome
mobile
great
via
social
get
amp
time
android
come
love
pop
party
map
one
line
day
circle
sxswi
austin
free
good
win
cool
network
launch
like
downtown
opening
go
got
today
temporary
people
download
download
tweet
happy
hour
looking
panel
update
sell
yes
use
heard
hand
attendees
rock
way
may
thing
ready
make
every
going
video
look
popup
location
user
wait
route
big
release
us
device
everyone
itunes
well
possibly
far
think
hot
must
keep
first
conference
work
tv
nice
tonight
excited
best
away
ever
smart
tech
team
amazing
live
info
temp
oh
year
set
talk
need
marissa
hey
session
others
open
really
check
congress
available
interactive
winning
idea
could
school
music
tomorrow
product
getting
saw
search
already
interesting
begin
ca
see
right
place
coming
thank
next
want
phone
show
ûï
fun
traffic
action
case
share
also
major
demo
laptop
pretty
week
feature
friend
even
around
mayer
geek
design
brilliant
called
guy
booth
6th
marketing
technology
world
genius
lot
life
sure
photo
com
interactive
still
say
game
giving
detail
buy
shop
better
temp
oh
know
event
last
rumor
back
opening
downtown
launch
store
pop
one
map
party
go
got
love
best
excited
come
day
line
network
cool
check
open
really
others
session
hey
set
need
marissa
talk
game
say
still

Text with highlighted words

Waiting in line for the iPad 2. They said they may have some left...crossing my fingers. #sxsw



Prediction probabilities



#Recommendations

- Both Google and Apple should have a strong presence at the yearly South by Southwest music and media festival
- Promotional offers to users who send out a positive tweet
- Teams for the respective company need to monitor and respond to negative tweets live

#Future Work

- Larger balanced dataset
- Remove misspelled words
- Perform Deep NLP: Word Embeddings

#Thank You!!! Any Questions???