

# Twitter Yukun

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*2017/12/12*

## ===Introduction===

I was a player of both online games, League of Legends and Heroes of the Storm. I want to explore and compare online critics for these two games, since they are major competitors in the MOBA game category. Also I want to start my future career in the gaming industry, so that this project can prepare me for the future.

```
## Loading required package: RCurl
## Loading required package: bitops
## Loading required package: rjson
##
## Attaching package: 'dplyr'
## The following objects are masked from 'package:twitterR':
##
##     id, location
## The following objects are masked from 'package:stats':
##
##     filter, lag
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
## Loading required package: data.table
##
## Attaching package: 'data.table'
## The following objects are masked from 'package:dplyr':
##
##     between, first, last
## Loading required package: NLP
##
## Attaching package: 'NLP'
## The following object is masked from 'package:ggplot2':
##
##     annotate
## Loading required package: RColorBrewer
##
## Attaching package: 'plotly'
## The following object is masked from 'package:ggplot2':
##
##     last_plot
```

```

## The following object is masked from 'package:stats':
##
##   filter
## The following object is masked from 'package:graphics':
##
##   layout
## Loading tidyverse: tibble
## Loading tidyverse: tidyr
## Loading tidyverse: readr
## Loading tidyverse: purrr
## Conflicts with tidy packages -----
## annotate():  ggplot2, NLP
## between():   dplyr, data.table
## complete():  tidyr, RCurl
## filter():    dplyr, plotly, stats
## first():     dplyr, data.table
## id():        dplyr, twitterR
## lag():       dplyr, stats
## last():      dplyr, data.table
## location():  dplyr, twitterR
## transpose(): purrr, data.table
##
## Attaching package: 'reshape2'
## The following object is masked from 'package:tidyr':
##
##   smiths
## The following objects are masked from 'package:data.table':
##
##   dcast, melt
## [1] "Using direct authentication"
## Warning in strptime(x, fmt, tz = "GMT"): unknown timezone 'default/America/
## New_York'

```

===Sentiment===

From the sentiment analysis we can directly observe the most frequent words used in the Tweets we choose, and the positive and negative sentiments of those words.

## Sentiment Analysis for League of Legends

```

## Joining, by = "word"
## # A tibble: 2,994 x 2
##   word      n
##   <chr> <int>
## 1 league 1666
## 2 legends 1644
## 3      rt   602
## 4 youtube 409

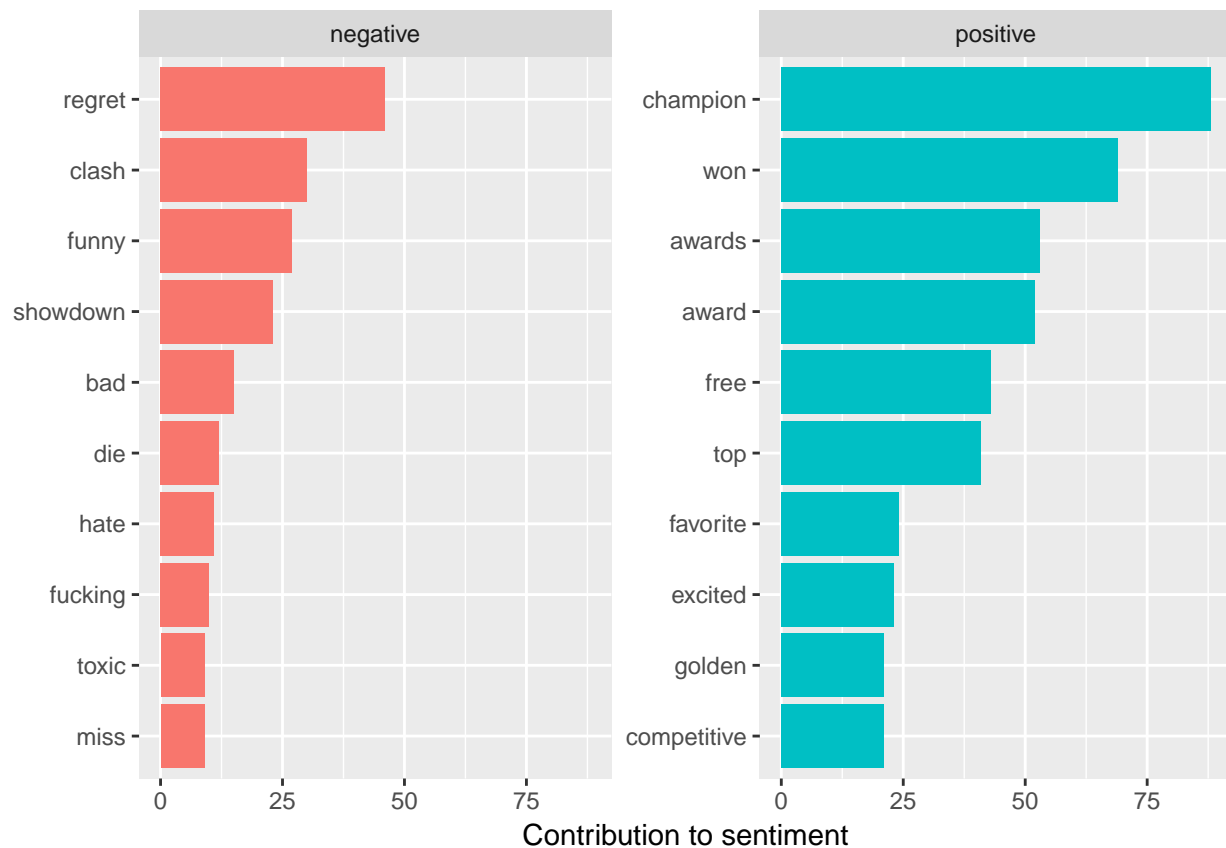
```

```
## 5      video    253
## 6      live    170
## 7      game    159
## 8 streaming   137
## 9      playing  134
## 10     twitch   133
## # ... with 2,984 more rows

## Joining, by = "word"
## Joining, by = "word"

## # A tibble: 286 x 3
##       word sentiment     n
##   <chr>      <chr> <int>
## 1 champion positive    88
## 2      won positive    69
## 3 awards positive    53
## 4  award positive    52
## 5  regret negative    46
## 6   free positive    43
## 7    top positive    41
## 8  clash negative    30
## 9  funny negative    27
## 10 favorite positive    24
## # ... with 276 more rows

## Selecting by n
```

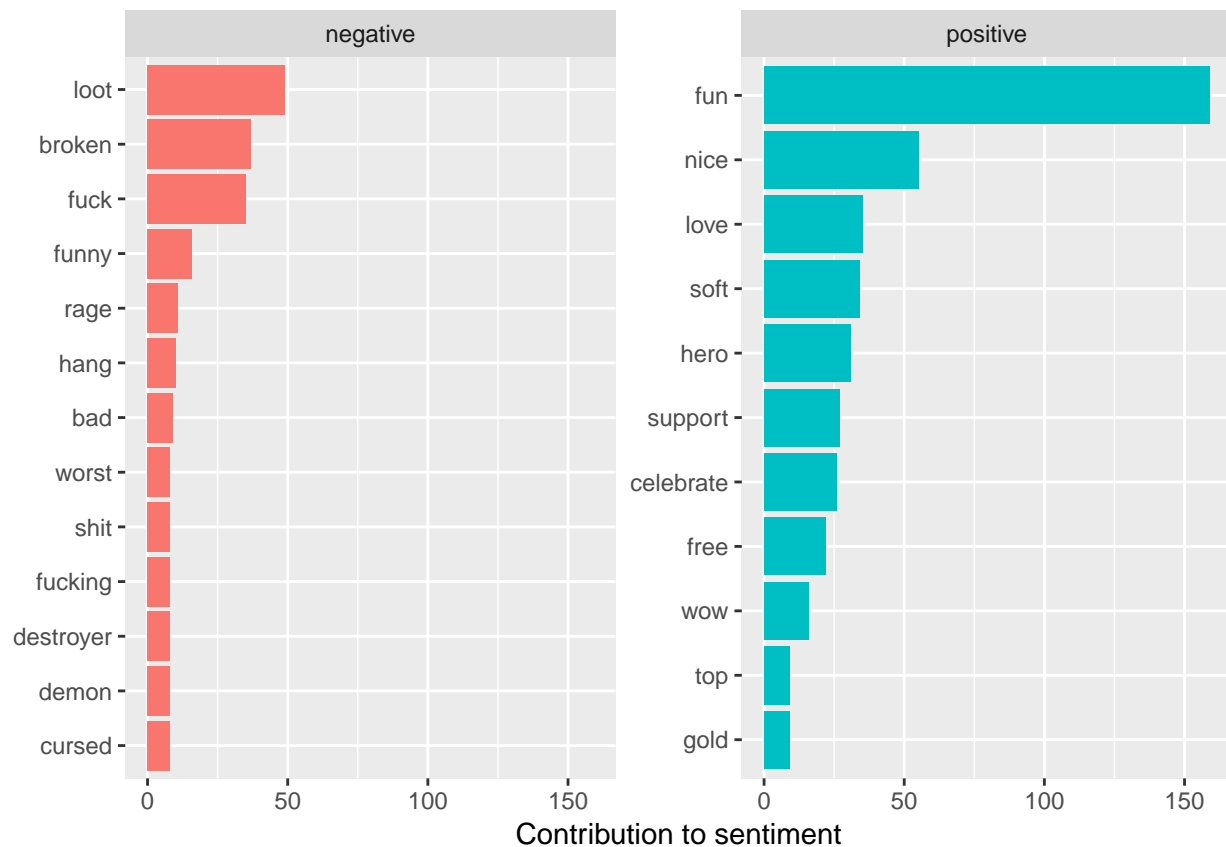


## Sentiment Analysis for Heroes of the Storm

```
## Joining, by = "word"
## # A tibble: 2,486 x 2
##       word      n
##   <chr> <int>
## 1 heroes 1500
## 2 storm 1420
## 3 rt    710
## 4 lil   576
## 5 patch 490
## 6 youtube 413
## 7 video 255
## 8 event 239
## 9 skins 238
## 10 junkrat 227
## # ... with 2,476 more rows

## Joining, by = "word"
## Joining, by = "word"
## # A tibble: 243 x 3
##       word sentiment      n
##   <chr>      <chr> <int>
## 1 fun    positive 159
## 2 nice   positive  55
## 3 loot   negative  49
## 4 broken negative  37
## 5 fuck   negative  35
## 6 love    positive  35
## 7 soft    positive  34
## 8 hero    positive  31
## 9 support positive  27
## 10 celebrate positive 26
## # ... with 233 more rows

## Selecting by n
```

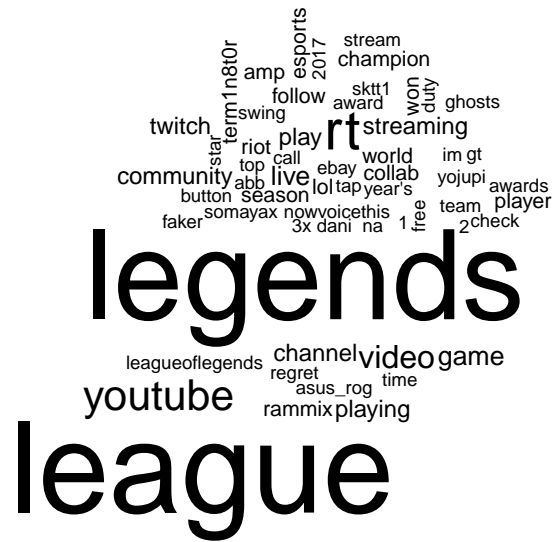


### ===Word Cloud===

From the word cloud, we can divide words into positive (Blue) and negative (Red) categories. And the larger the size, the bolder the font, the more frequently that word is observed.

### Word Cloud League

```
## Joining, by = "word"
```



```
## Joining, by = "word"
```

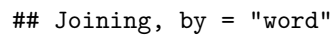
# negative



# positive

Word Cloud Heroes

```
## Joining, by = "word"
```





# negative



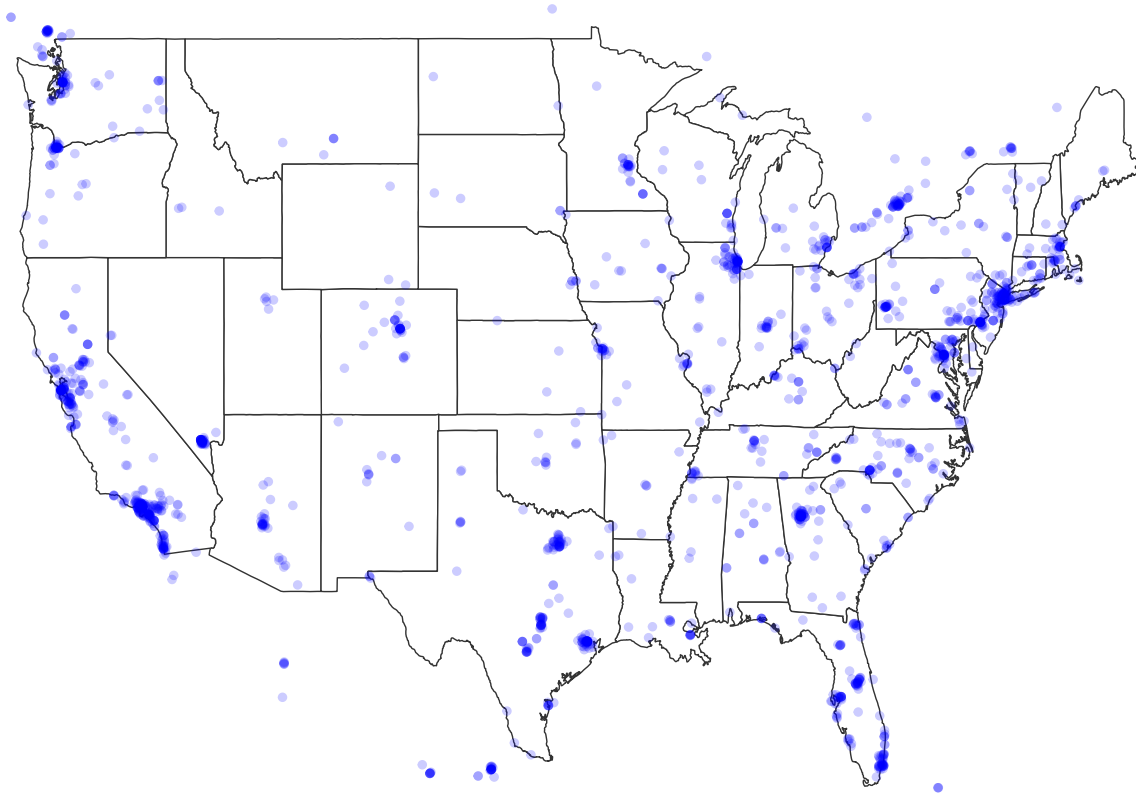
# positive

===MAP===

Google allows only 2500 requests per day for geocode, these two maps are not comprehensive. However, these maps provide a general overview of the locations Leagues of Legends & Heroes of the Storm. From the map, we observe that Tweets are mainly located at West Coast, Great Boston and New York Area, Chicago, and Texas. These regions have a lot of colleges, which represents the fact that the players are mainly college students. Other than these regions, Tweets are observed all over the USA, which means that the two games are both popular over the country.

## Map for League

```
## Capturing tweets...
## Connection to Twitter stream was closed after 200 seconds with up to 6644 tweets downloaded.
## 17443 tweets have been parsed.
##
## Attaching package: 'maps'
## The following object is masked from 'package:purrr':
##
##   map
```



## Map of Heroes

```
## Capturing tweets...
## Connection to Twitter stream was closed after 200 seconds with up to 6720 tweets downloaded.
## 16382 tweets have been parsed.
```

