





LEAGUE

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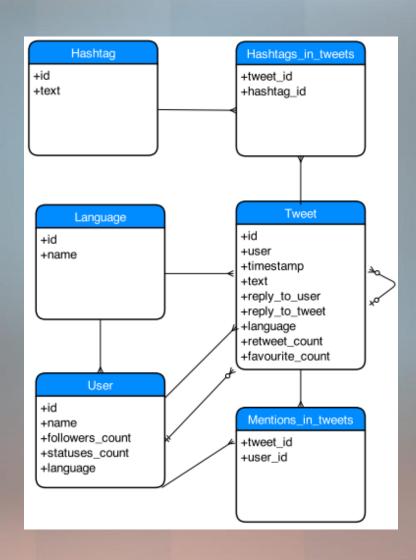
Goals of the project

- Find proper events,
- Prepare hashtags,
- Implement scripts which are using Twitter Streaming API,
- Choose interesting matches,
- Query database for interesting data,
- Create graphs and charts depicting significant features of analyzed data.

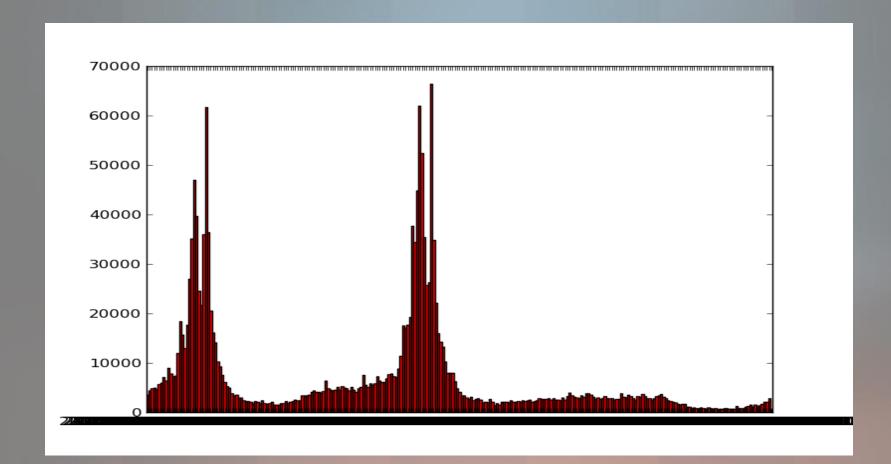
Gathering data

- Twitter Streaming API,
- Prepared 44 hashtags related to champions league and matches,
- Collecting data for almost 3 days (21.10 23.10),
- Got 1,784,265 tweets from 674,460 users,
- 2,739,238 hashtags used in those tweets,
- 53 languages used.

DB Schema



Tweets over time



Statistics

most popular languages

• en: 333,249

• es: 145,123

• fr: 38,499

• tr: 30,207

• it: 25,995

• pt: 15,981

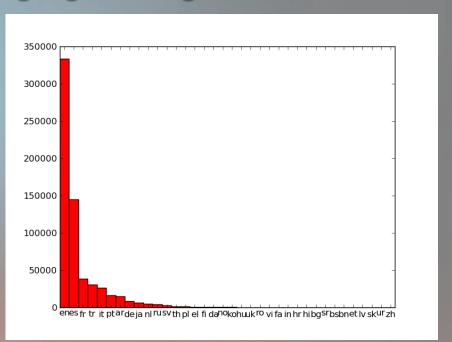
• ar: 15,104

• de: 8,726

• ja: 6,528

• nl: 5,151

languages histogram



Statistics

most popular hashtags

• #UCL: 399,384

#HalaMadrid : 267,256

• #LFC: 159,313

#ChampionsLeague : 104,690

#RomaBayern : 78,728

#RealMadrid: 48,884

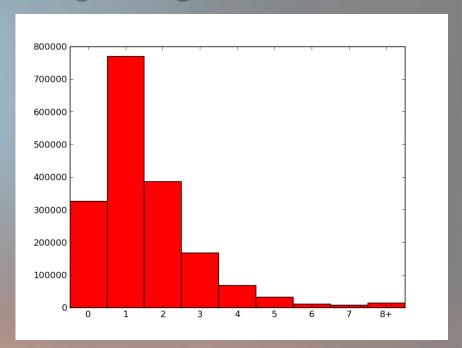
#Arsenal : 44,879

• #PSG: 40,224

#LIVvsRealMadrid: 37,812

• #Roma: 31,317

hashtags histogram

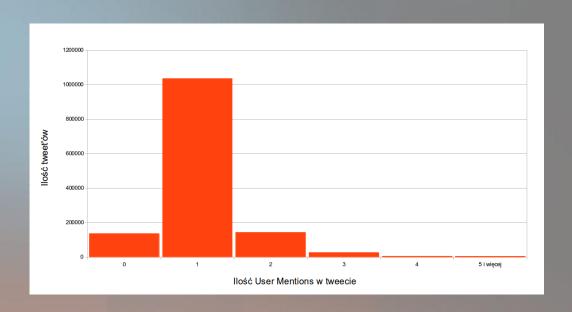


Statistics

most mentioned users

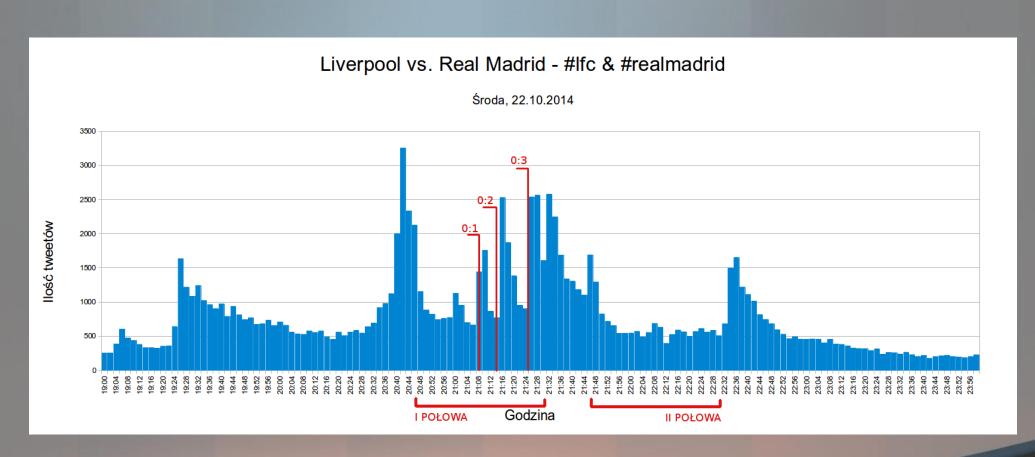
- Champions League: 99,393
- Real Madrid C. F: 80,870
- Liverpool FC: 48,971
- Cristiano Ronald: 26,170
- Metsut Ozil: 24591
- MisterChip(Alex: 23,835
- Real Madrid C.F.: 18,406
- FC Barcelona: 18,395
- Chelsea FC: 17,464
- Gareth Bale: 16,994

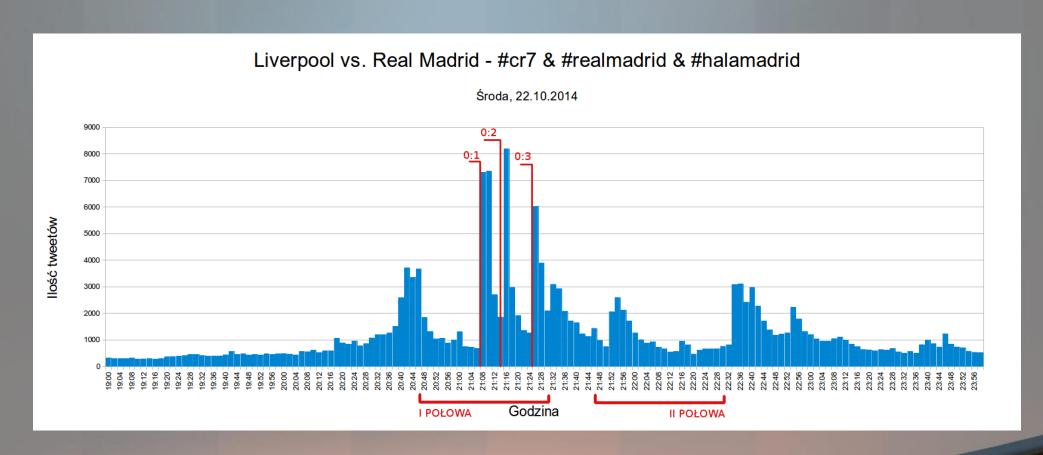
user mentions histogram



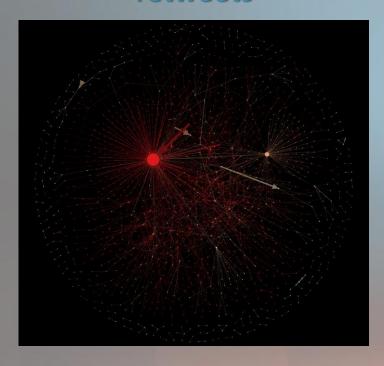
Data analysis

- Picked two most optimistic matches AS Roma vs FC Bayern and FC Liverpool vs Real Madrid,
- Analized user mentions,
- Analized retweets (standard numbers plus groups in Gephi and CFinder),
- Analized chosen groups.





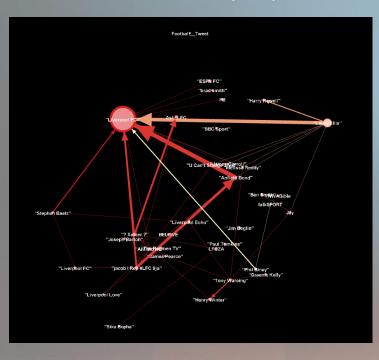
retweets



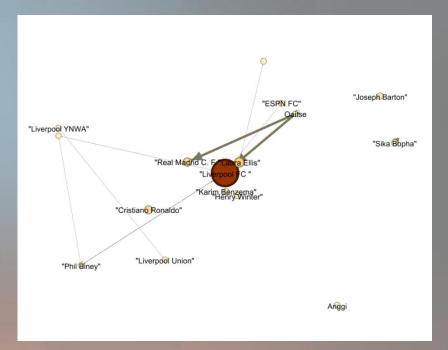
user mentions



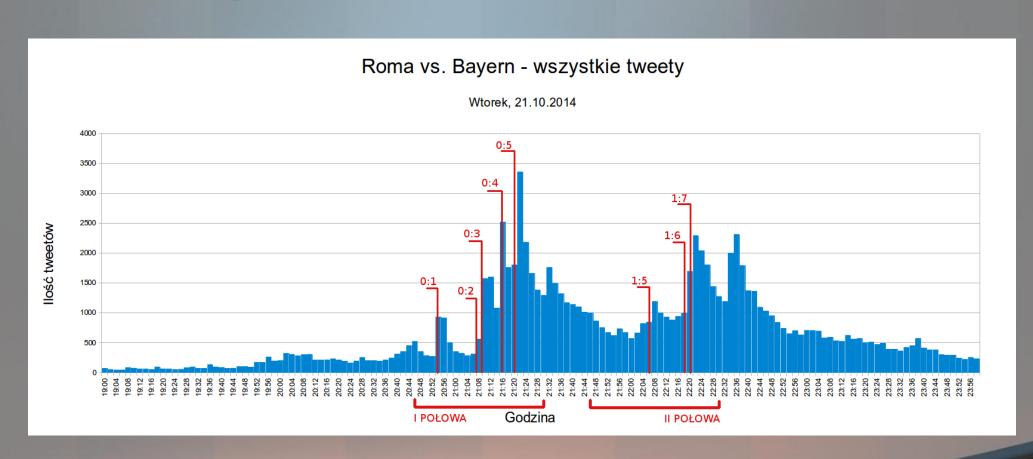
retweets (k>10)



user mentions (k>20)

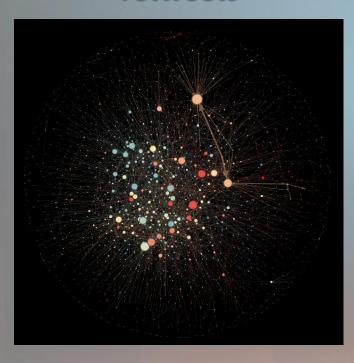


Roma: Bayern

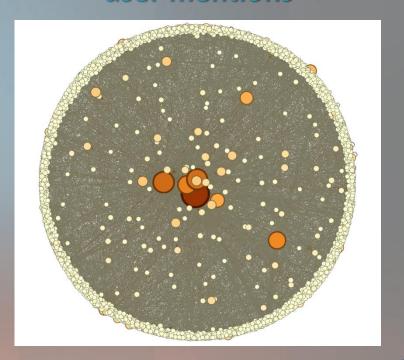


Roma: Bayern

retweets

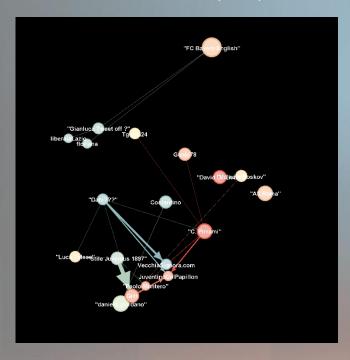


user mentions

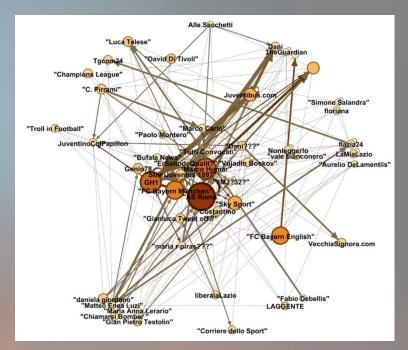


Roma: Bayern

retweets (k>20)



user mentions (k>25)



Conclusions

- Hashtags and user mentions are very popular on twitter platform (1/6 of tweets didn't have hashtag, 30% of tweets didn't mention anybody),
- Users quickly responds on twitter after some events,
- "reply to" option is rarely used on twitter in comparison to user mention,
- Social networks between italians are bigger than germans, english or spanish,
- It's really important to choose proper keywords to search for data like this.

What can be done

- Download additional data through REST API (for example, the database misses source tweets of some retweets),
- Search for dependencies between matches,
- Similar research on data from final match to see how the prestige of the event affects twitter's traffic.