Reddit Comments and I: A Love Story

Data

91,558,594 - all That's a lot of comments

10k, 100k, 1m Sampling tests

494,610 - r/gaming

But a subset works, as well

Project Pipeline

remove links, punctuation, html; lemmatize



TFIDF vectorizer

Cut number of topics (SVD)

Reduce dimensions (LSI)

Cluster (k-means)

Results: Overview

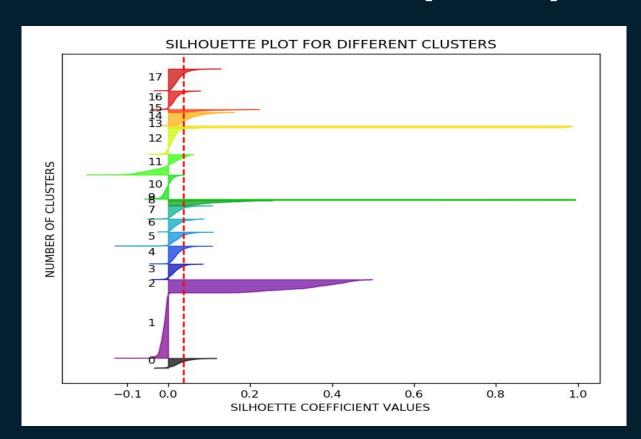
Clustering on the entire data set:

- Only 49% of variance explained by features
- Wild silhouette plots (clusters too spread out from centroids)
- > Hard to make sense out of clusters upon inspection

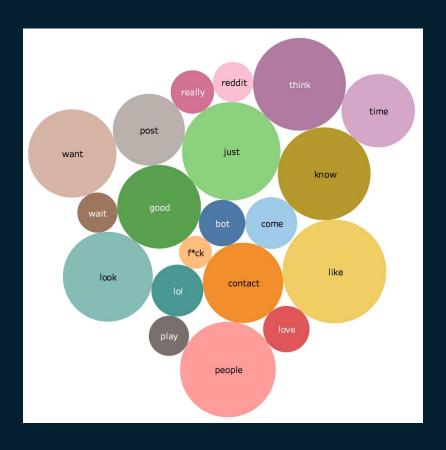
Clustering on r/gaming:

- > 5.2% of variance explained by features
- > Same issues as the entire data set

Results: Silhouette Scores (subset)



Results: 20 Most Common Words



- Cannot be discarded
- Multiple meanings
- Like: verb,
 noun,
 preposition,
 adverb

Conclusion

- Words which carry meaning also add noise
- Data set too diverse for clustering
- Data may not work well for analysis
- May need a different approach altogether



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