



# Using NLP to Explore 'Love' In **TED** Talks

By Sean Davern

# Source Data

TED

kaggle

Filter, Clean

Tokenize

Corpus

Transcripts

Contain  
love+

Sentences  
with love+

2550

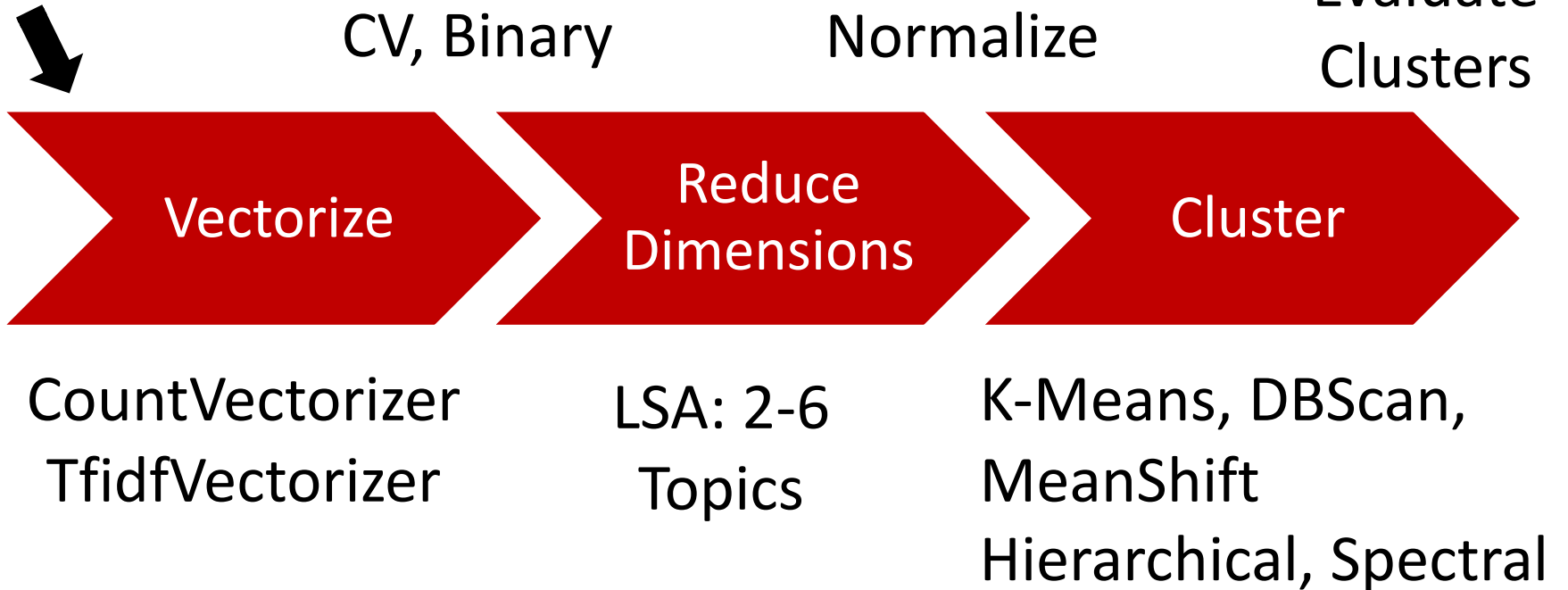
1132

1132 'Documents'  
3160 Sentences



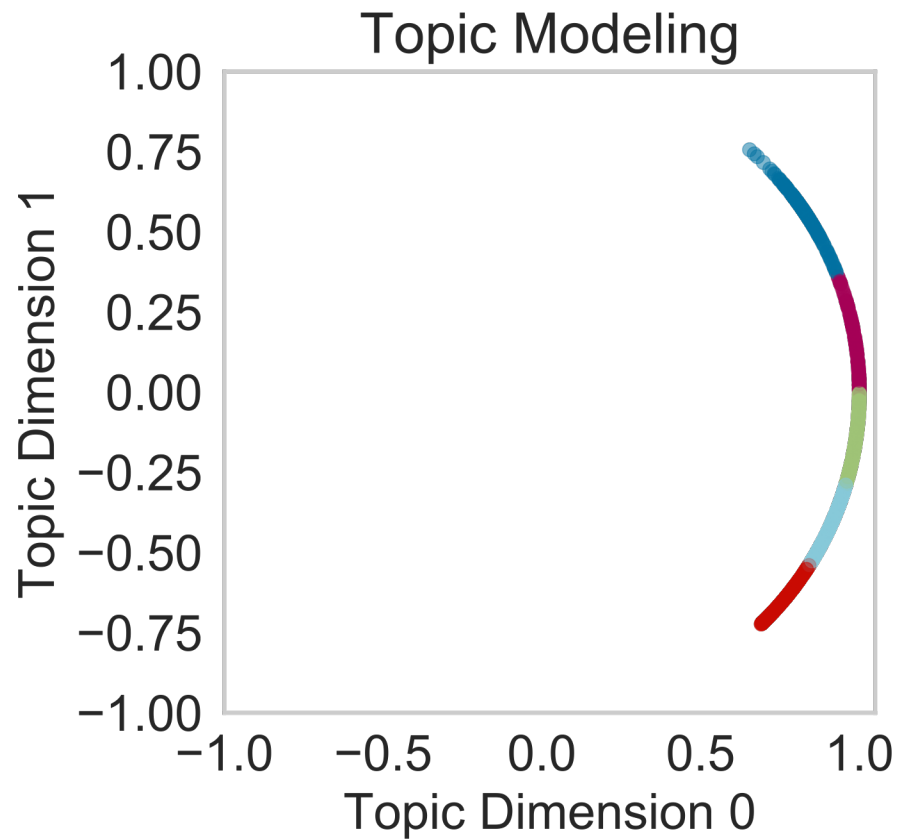
# NLP Methods Used

Corpus





# Normalize & Cluster

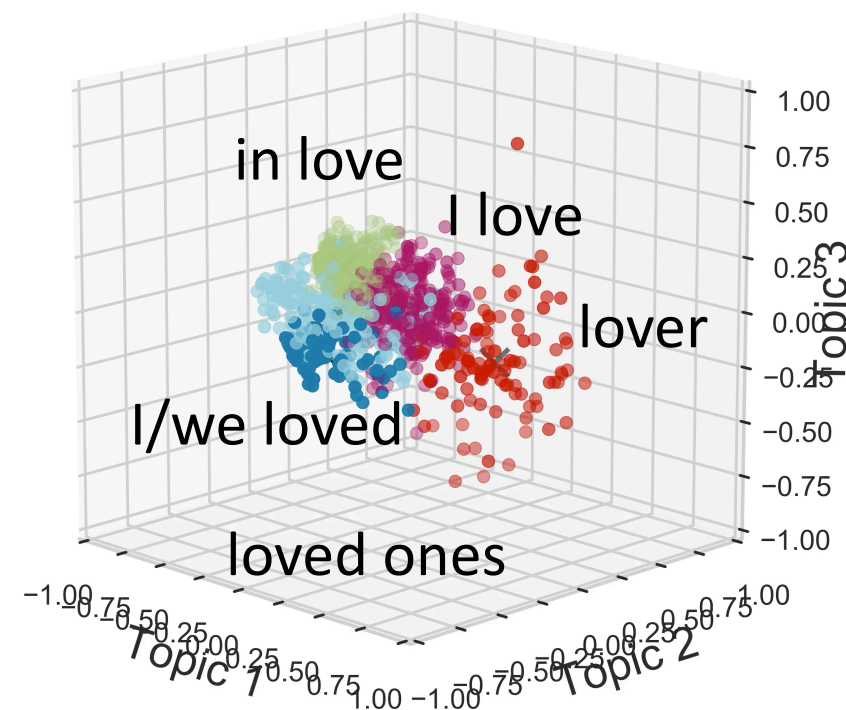


- Normalizing (projecting onto the unit circle) covers a relatively small arc
- Dimension 0 can effectively be neglected (visually)

# 4-Topic Model



Topic Modeling Clusters





## Conclusions & Future Work

- NLP was able to identify distinguishable clusters
- These clusters weren't particularly insightful regarding exploring how authors talked about love.
- Tools to mathematically validate the distinguishability of clusters in higher dimensions would be helpful!

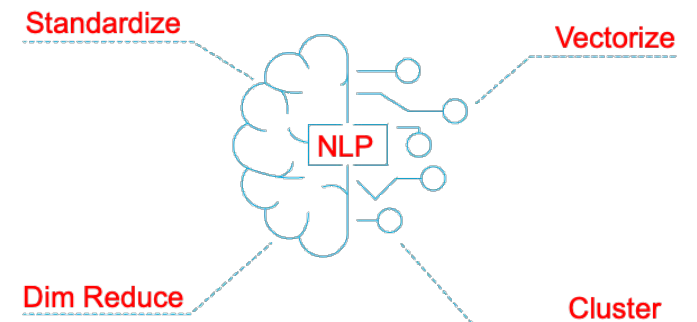


# Questions?

**TED**

Ideas worth  
spreading

+

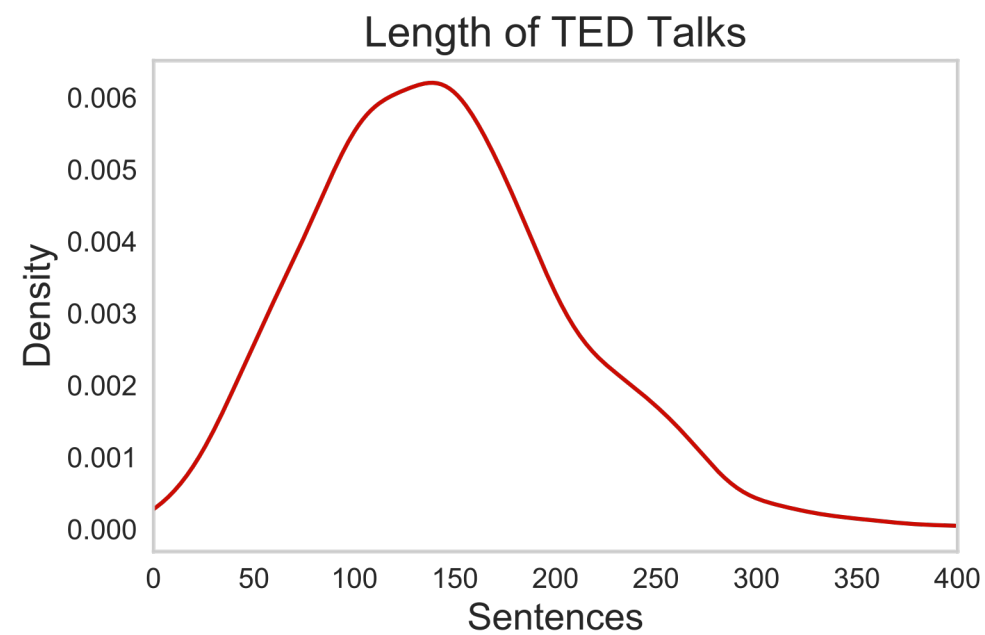
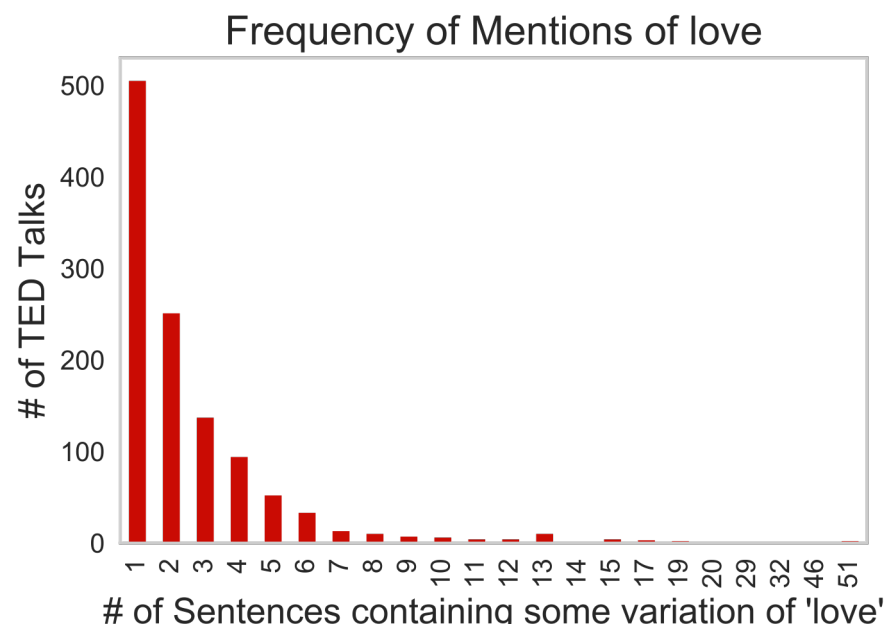




# APPENDIX



# Love Content





## Cluster Sense Making

- (green): (obj) “in love”, “an expression of love”, I love (1/2)
- (mag): (present tense feeling) I love, his real love, - I love you, a lot of love in these passwords – expect to find love (3-5)
- (cyan): (past tense feeling) I/we loved (3+)
- (blue): loved ones – loved it – loved the sound – we loved (1)
- (red): (n., obj.) plant lover – gave them love, met the love of their life, all this love, – not my lover, music lovers, jazz lovers (5+)