Intro to Text Analysis

Bay Area Women in ML/DS

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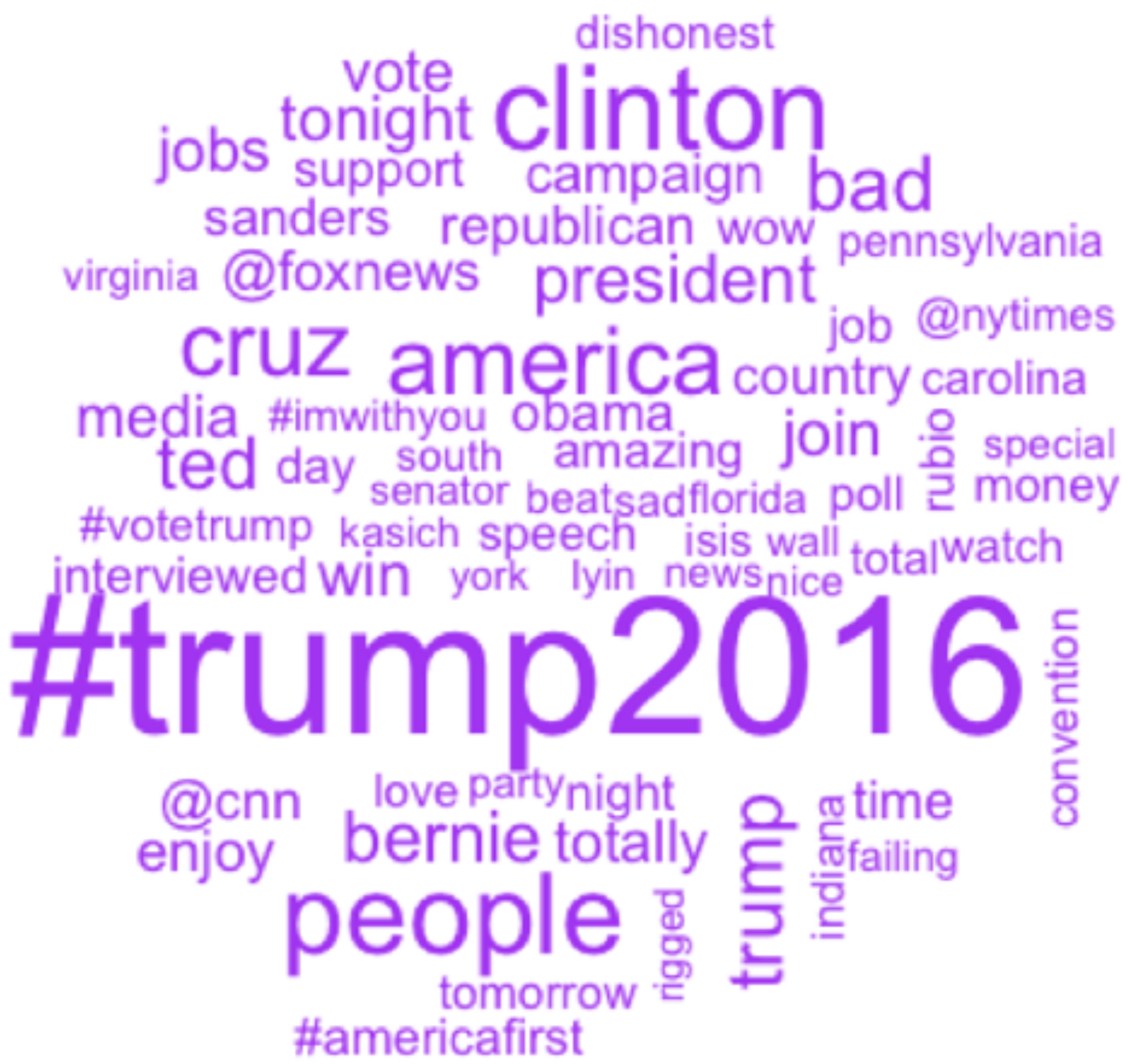
Overview



- Intro to Text Analysis
- Feature Engineering for Text Analysis
  - How to convert raw text data to feature rich data ready for ML
  - Bag of Words & TF-IDF
- Topic Modeling & LDA
- Text Analysis Software in R & Python

Terminology

- Stemming
- Tokenization
- Document Term Matrix (DTM)
- Bag of Words
- TF-IDF
- Word2Vec
- Topic Modeling

Text Analysis in R

- tidytext by Julia Silge & David Robinson
  - http://tidytextmining.com
- quanteda by Kenneth Benoit
- tokenizers by Lincoln Mullen
- tm (Text Mining)
- topicmodels (Topic Modeling)
- lda (Topic Modeling)

Text Analysis in Python

- nltk (Natural Language Toolkit)
- scikit-learn
  - http://scikit-learn.org/stable/tutorial/text_analytics/working_with_text_data.html
- gensim (Topic Modeling)
  - https://www.analyticsvidhya.com/blog/2016/08/beginners-guide-to-topic-modeling-in-python/