Sentiment Analysis of Tweets using Graph Models

- Generate graph model based on syntax and semantics of the tweet
  - Time permitting, test efficacy of different graph models
- Generate "ground truth" structures of graphs of positive tweets versus negative tweets
- Compare new tweets to ground truth models by using different graph similarity measures
  - Edit distance, feature extraction, iterative methods
- Use data mining techniques to determine probability density of how positive or negative a tweet is
  - Time permitting, test efficacy of different DM techniques (regression, SVN, etc)

Goal/Evaluation of Hypothesis

- Want to be able to see what the general public feels about a certain topic- sentiment analysis of tweets
- Start out by choosing a target word, such as Obama or General Motors
- Include 80% of tweets with target word in model training, leave out 20% for testing our model. (Cross validation) All tweets are provided with ground truth in dataset.
- Evaluate performance of model based on different graph structures, similarity measures, or DM techniques.