Topic Modeling

Machine Learning

* Supervised Learning (ex. Sentiment analysis)
* Unsupervised Learning (ex. Topic Modeling)

What documents are we talking about?

Get a hierarchical layer of relationships building attributes that fit into model?

For each work in document, relate it to a topic.

Author-Topic: assumption that authors are talking about the same topic

Discussed different papers/methods

Jupiter Notebook posted intended to help with homework assignment.

Semantic Networks: Semantics + Network Analysis

Ontologies to pull it together and create higher level analytics

Examples of creating schema in slides

Image and Video Basics

* Slides explanatory, links are helpful
* Each video can be seen as many still images

Basic Image Processing

* Image pre-processing smoothing techniques
  + Care about ‘center pixel’
* Watched video on ‘edge detection’

Image Matching

* Features of images are edges and contours
* Deep Learning
  + Ex. FB – Want to tag a friend? Need to train on positive and negative images