Fall 2014 - summary

• Duty
  • CS412 TA
  • AAAI review
  • help a bit on NSF proposal writing

• Research: guided topic model (with Hongkun)
Guided topic model

• Given several labels, we want to find a topic (a multinomial distribution over vocabulary) corresponding to the guidance.

• We try to develop a model for the word co-occurrence, since it’s shown to produce higher coherence. Then, we add the label as regularization term.

• Performance:
  • Higher coherence
  • The case study of regularization seems reasonable.
  • But on a classification task, it doesn’t show better results than PLSA
A lesson from topical hierarchy construction (STROD)

• Hierarchy is more complicated than we previously think; it may not possible to do recursive construction (at least in theory).