**1) Latent Dirichlet Allocation**

Paper’s summary (probabilistic unsupervised algorithm)

This paper has described LDA to model text corpora and other collections of discrete data. Empirical results demonstrate that LDA performs better than other models like the unigram, mixture of unigrams, and pLSI in document modeling, document classification and collaborative filtering.

**2) Labeled LDA: A supervised topic model for credit attribution in multi-labeled corpora**

Paper’s summary (Multi-labeled supervised LDA / Supervised version of LDA)

In this paper Label LDA is introduced to model multi-labeled corpora including user supervision. This model improved upon LDA by defining a one-to-one correspondence between latent topics and labels.

**3) Understanding Android Fragmentation with Topic Analysis of Vendor-Specific Bugs**

(NEED TO READ THE WHOLE PAPER)

Paper’s summary

Android fragmentation is studied in this paper by analyzing bug reports of two popular vendors. LDA is used in the original data and Labeled LDA is used in the labeled data where the bug reports are manually labeled. It is found that Labeled LDA produces more feature specific topics compared to LDA.

**4) Inferring User Interests in the Twitter Social Network**

Paper’s summary

A new methodology is proposed here to infer topics of interests of individual Twitter users by discovering the topic experts the user is following. It is found that the methodology proposed in this paper infers topics more accurately compared to the Labeled LDA.