**Proposal for IR related topic**

1. We plan to build a search engine for pictures. Our input is a picture. Then the search engine would process the picture by decomposing its image to get the eigenvector. Next, we will find ten pictures which are the most similar to the picture the users type.
2. We are going to build a search engine to search text messages. The input would be some key words. Then the search engine would look for the text messages containing the key words and retrieve the text messages with a similarity order.
3. The third idea for final project is about classification of spam messages. We are going to pre-process the data like clean the noise data. Then we transform messages into TF-IDF and do the classification with some mining methods. We are going to evaluate the algorithm and apply it into real data source.We have not decided our data source though.