

Topic: **Implicit Emotion Classification**
Github Link: <https://github.com/chengkangck/CLTeam>
Coding Language: **Python**

- **Session 0 : 11.04**

Achievements:

1. Github setup. (Kang Cheng)
2. We discussed about general idea and chose tools for this project. (Ruochen Li, Kang Cheng)
3. We chose python as our programming language and designed the data structure. (Ruochen Li, Kang Cheng)

Next steps:

1. Implement data structure and finish the evaluation part. (Kang Cheng)
2. Compare the label with gold label to count TP, FP and FN for precision, recall, micro, macro and f- score calculation. (Ruochen Li)

- **Session 1: 18.04**

Achievements:

1. We solved the problem of finding training data with help of Prof..
2. We discussed about the deficiency of our code design in evaluation. (Kang Cheng, Ruochen Li)
3. We decided to chose multi-class perceptron as our baseline. (Kang Cheng, Ruochen Li)

Next steps:

1. Reorganize the structure of evaluation. (Ruochen Li)
2. Look in detail into data to prepare for data preprocessing. (Ruochen Li)
3. Read tutorial about implementing multi-class perceptron. (Ruochen Li, Kang Cheng)
4. We prepare the submission report for evaluation. (Kang Cheng)

- **Session 2 : 25.04**

Achievements:

1. We reorganize the structure of evaluation method. (Ruochen Li)
2. We build an OOD structure. (Ruochen Li)
3. We get the idea of multi-class perceptron. (Kang Cheng)
4. We finish the evaluation report. (Kang Cheng)

Next steps:

1. Preprocessing the data provided by the professor. (Ruochen Li)
2. Achieve a multi-class perceptron. (Ruochen Li, Kang Cheng)

- **Session 3: 02.05**

Achievements:

1. We use bag of words during the training. (Kang Cheng)
2. we achieve the structure of perceptron. (Ruochen Li)

Next steps:

1. Preprocess the data before training them. (Kang Cheng)
2. Find solutions for the sparsity problem. (Ruochen Li)

- **Session 4: 09.05**

Achievements:

1. we preprocess the data by using regular expression. (Kang Cheng)
2. We used bag of word model to collect all of the different words in tweet.

(Ruochen Li)

Next steps:

1. We put the features and vectors in a matrix. (Ruochen Li)
2. We implement the feature extraction as a generation process. (Kang Cheng)
3. We store features in list to deal with sparsity problem, we store features as string. (Ruochen Li)

- **Session 5: 16.05**

Achievements:

1. We finished the submission report for baseline solution. (Ruochen Li)
2. we have a idea about structure for our middle term presentation. (Kang Cheng)

(Ruochen Li)

Next steps:

1. We finish the slides for the middle term presentation. (Kang Cheng)
2. Get start with Bigram features and using CNN as the classification method.

(Ruochen Li)

- **Session 6: 30.05**

Mid-term presentation

- **Session 7: 06.06**

Achievements:

1. Improve the tokennizer, reserve emotional punctuation, stick to all capital words
2. remove stop words (NLTK stop words dictionary)

Next steps:

1. Feature extension(TF-IDF, part of speech using spacy)

- **Session 8: 20.06**

Achievements:

1. features in TF-IDF
2. start classification with CNN and SVM

Next steps;

1. continue to work on classification with SVM (Kang Cheng)
2. continue to work on classification with CNN (Ruochen Li)

- **Session 9: 27.06**

Achievements:

1. prepare to use classification with sklearn.SVM.LinearSVC (Kang Cheng)
2. work on the classification with CNN, import library (Ruochen Li)

Next steps;

1. continue to work on classification with SVM (Kang Cheng)
2. continue the classification with CNN (Ruochen Li)

- **Session 10: 04.07**

Achievements:

1. finalize classification with SVM and Bayes using TF-IDF (Kang Cheng)
2. almost finalize classification with CNN, achieve classification with SVM using

word embedding (Ruochen Li)

Next steps;

1. finalize classification with CNN
2. Prepare outline for the report