**Subgatt:**

This is a tensorflow based implementation of Subgraph Attention as discussed in the paper.

**Dataset:**

1. The dataset\_class folder contains all the datasets which we used in experiments of graph classification.

**How to run:**

**1) For Graph Classification:** (Default dataset is set to MUTAG)

python graphclassification.py

**Requirements:**

1) python (version 3.6 or above)

2) tensorflow (version 1.13)

3) networkx

4) keras

5) numpy

6) pickle

7) scipy

8) pandas

9) collections

**Parameters:**

**1) For Graph Classification:**

dataset: The name of the dataset

epoch: Number of epochs to train the mdoel

sub\_samp: Number of subgraph samples for each node

sub\_leng: The maximum length of any subgraph

pool\_rt: Pooling ratio

pool\_lay: Number of SubGattPool layers

sub\_lay: Number of SubGatt attention layer

learning\_rate: Learning rate

embd\_dim: Embedding dimension

We can specify these parameters while running these python files.

For eg: To specify any other dataset, run following command:

python graph\_classification.py --dataset NCI1