

# paper\_code\_documentation

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## Text Infilling

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Code URL: [https://github.com/VegB/Text\\_Infilling](https://github.com/VegB/Text_Infilling)

## Result

Not able to follow through the code tutorial.

## Steps:

1. Download the code and install Texar.

```
git clone https://github.com/VegB/Text_Infilling
cd Text_Infilling
pip install --user -e .
```

2. Navigate to the infilling demo directory and download the dataset. The instruction provided on Github didn't work, I followed the README.MD in the `text_infilling` directory from this point. Downloaded data is stored in `yelp_data/`.

```
cd text_infilling
python data_utils.py
```

You might have to run extra code to install required packages if you don't have them already. In my case, I had to get `tensorflow` and `matplotlib`.

```
pip install "tensorflow>=1.15,<2.0"
pip install matplotlib
```

3. Code template to execute is provided as follow:

```
python [MODEL].py --mask_rate [MASK_RATE] --blank_num [BLANK_NUM]
--filename_prefix 'pos.' --data_dir './yelp_data/pos/'
```

Here is what I tried, set mask rate to 30%, number of blank in an example is 1, and chose the self-attention mode.

```
python self_attn.py --mask_rate 30 --blank_num 1 --filename_prefix 'pos.'  
--data_dir './yelp_data/pos/'
```

An Error was raised from the above code. The error message:

```
Traceback (most recent call last):  
  File "self_attn.py", line 335, in <module>  
    tf.app.run(main=_main)  
  File "/Users/kelichiu/Desktop/project_tif/lib/python3.7/site-packages/tensorflow_core/python/platform.py",  
    line 40, in run  
    _run(main=main, argv=argv, flags_parser=_parse_flags_tolerate_undef)  
  File "/Users/kelichiu/Desktop/project_tif/lib/python3.7/site-packages/absl/app.py",  
    line 300, in run  
    _run_main(main, args)  
  File "/Users/kelichiu/Desktop/project_tif/lib/python3.7/site-packages/absl/app.py",  
    line 251, in _run_main  
    sys.exit(main(argv))  
  File "self_attn.py", line 64, in _main  
    hparams=args.word_embedding_hparams)  
  File "/Users/kelichiu/Desktop/repos/Text_Infilling/texar/modules/embedders/embedders.py",  
    line 53, in __init__  
    self._hparams)  
  File "/Users/kelichiu/Desktop/repos/Text_Infilling/texar/modules/embedders/embedder_base.py",  
    line 33, in _init_parameterized_embedding  
    hparams, init_value, num_embeds, self.variable_scope)  
  File "/Users/kelichiu/Desktop/repos/Text_Infilling/texar/modules/embedders/embedder_utils.py",  
    line 191, in get_embedding  
    initializer = layers.get_initializer(hparams["initializer"])  
  File "/Users/kelichiu/Desktop/repos/Text_Infilling/texar/core/layers.py",  
    line 333, in get_initializer  
    initializer = utils.get_instance(hparams["type"], kwargs, modules)  
  File "/Users/kelichiu/Desktop/repos/Text_Infilling/texar/utils/utils.py",  
    line 209, in get_instance  
    (class__.__module__, class__.__name__, key, class_args))  
ValueError: Invalid argument for class  
tensorflow.python.ops.init_ops.RandomNormal: mean, valid args:set()
```

I have change the `--mask_rate 30` and `--blank_num 1` with variations between int, float and percentage, but no value could successfully run the code. Googled solutions but no relevant answers were found.