To train a model on AAPD dataset, run:
python train_AAP.py --model=model_name
To train a model on Reuters dataset run:
python train_Reuters.py --model=model_name

Similarly, for running test AAPD dataset (to evaluate a model):
python test_AAP.py --model=model_name
Similarly, for running test Reuters dataset (to evaluate a model):
python test_Reuters.py --model=model_name

Possible candidates for "model_name" are:
CNN
CNN_att
CNN_capsule
CNN_heinsen_capsule
CNN_DSA
CNN_DSA_global
CNN_PCaps
CNN_custom
CNN_custom_alpha_ablation
CNN_custom_global
CNN_custom2

Descriptions:
CNN: Convolutional Neural Network (similar to Kim et al. version)
CNN_att (Convolutional Neural Network + attention)
CNN_capsule (CNN + Dynamic Capsule Routing)
CNN_heinsen_capsule (CNN + heinsen Capsule Routing)
CNN_DSA (CNN + Dynamic Self Attention)
CNN_DSA_global (CNN + Dynamic Self Attention for Sentence encoding)
CNN_PCaps (CNN + "non-routing" mechanism inspired from PCapsNet)
CNN_custom (CNN + "new routing" + "reverse normalization")
CNN_custom_alpha_ablation (CNN + "new routing" + "reverse normalization"- Highway connection)
CNN_custom_global (CNN + "new routing" + "reverse normalization" for sentence encoding)
CNN_custom2 (CNN + "new routing")

Project navigation guide:
Hyperparameters used for each model in AAPD are in configs/AAPD_args.py
Hyperparameters used for each model in Reuters are in configs/Reuters_args.py
process/ directory have preprocessing codes for AAPD and Reuters. (but the data is already preprocessed within processed_data/. So not need to process further).
data/ directory have the data in use
Preprocessing requires word2vec embeddings in embeddings/word2vec directory. (download google word2vec 300 dimension embeddings put it in the directory and run bin2txt.py)

saved_params have the model weights. (right now not all the weights are here, but could be downloadable from:
https://drive.google.com/drive/folders/15fRWD3bWSb_2VRm0Hy1OcMQ_UKqsJyex?usp=sharing)
models/modules have the routing codes
models/ have all the model codes
utils/ have some evaluation and other utilities code.

Credits:
heinsen routing is based on
https://github.com/glassroom/heinsen_routing/blob/master/heinsen_routing.py
The data were downloaded from: https://github.com/castorini/hedwig
(word2vec bin file, and bin2txt.py too are available through a link in their repository).
The library was also referenced for initial CNN implementations.

Results in results.pdf.