

Word-level language model FNN

Training, Testing, and Generating New Text

This example trains a FNN on a language modeling task. By default, the training script uses the Wikitext-2 dataset, provided.

```
# Train a FNN Model
mkdir saved_model
python main.py --cuda --epochs 15 \
  --model FNN --bptt 10 --dropout 0 --save saved_model/FNN.pt

# Train a FNN Model with shared input-output layer
python main.py --cuda --epochs 15 \
  --model FNN --bptt 10 --dropout 0 --tied --save saved_model/FNN_tied.pt
```

The trained models are automatically evaluated on the validation and test set, with Perplexity and Spearman Correlation metrics, in `main.py`.

The trained model can then be used by the generate script to generate new text.

```
bash generate.sh
```

Program Output

The output of `main.py` is displayed in terminal.

Below is the final output of vanilla FNN:

```
=====
| End of training | test loss  5.47 | test ppl   236.40 | spearman correlation 0.3885
=====
```

Below is the final output of FNN with shared input-output layer:

```
=====
| End of training | test loss  5.35 | test ppl   210.22 | spearman correlation 0.2050
=====
```

Texts generated are stored in `gen_txt/`.