neural-collaborative-filtering

Files

> `data.py` : prepare train/test dataset
>
> `utils.py` : some handy functions for model training etc.
>
> `metrics.py` : evaluation metrics including hit ratio(HR) and NDCG
>
> `gmf.py` : generalized matrix factorization model
>
> `mlp.py` : multi-layer perceptron model
>
> `neumf.py` : fusion of gmf and mlp
>
> `engine.py` : training engine
>
> `train.py` : entry point for train a NCF model

It can be observed that NeuMF performs better than MLP and GMF.

Pytorch Versions

The repo works under torch 1.0. You can find the old versions working under torch 0.2 and 0.4 in **tags**.

TODO

- Batchify the test data to handle large dataset.