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Code and Description

This file contains instructions for running the code and navigating folders

Running the code
Language: python2
Required packages: tensorflow, numpy, csv, copy, random, math, sys
Data Included: small subsection of the full ratings.cvs (full ratings.csv is > 600MB)
Model1:

- Includes rating at the time the review was created, average rating, userID, and timestamp

Model2:

- average rating, userID, and timestamp

Adjustable constants (found in ffnet.py):

- filename: data to use, must match ratings.csv format
- hidden: number of hidden nodes
- lrate: learning rate
- epochs: number of training iterations over dataset
- training_split: approximate percentage of data to be used for testing
- data size: number of data columns to use (make large to use all data)

Produced files:

- data/ contains the partial threat
- results/ contains all classifications and matching labels for model and comparison
- models/ contains weights and biases of both models
- output to terminal: mean squared errors for both models

Running the File:
(from terminal with packages installed, constants changed in ffnet.py if desired)
python2 ./ffnet.py

Results
Machine:

- CPU: 2 core, 4 thread, Intel i5U series processor
- 8GB ram
- data on SSD
- Linux subsystems for Windows

Example Run: results_example, models_example, example.txt

- Data: 493346 (based on timestamp) data rows in data/ratings_preprocessed.csv as described in the report

- Duration: 1h07 (to train and test both models)
- Mean Error results:
    - model1: 0.9428
    - model2: 1.3876

All code in ffnet.py was written by me