

TDT4171 – Exercise 5

By: Andreas Lønes

Implementation:

Backprop Skeleton:

Implemented computeHiddenDelta, updateWeights and computeOutputDelta based on the formulas from the book and the exercise.

In countMisorderedPairs I iterate over all pairs, run propagate them and compare the output rating.

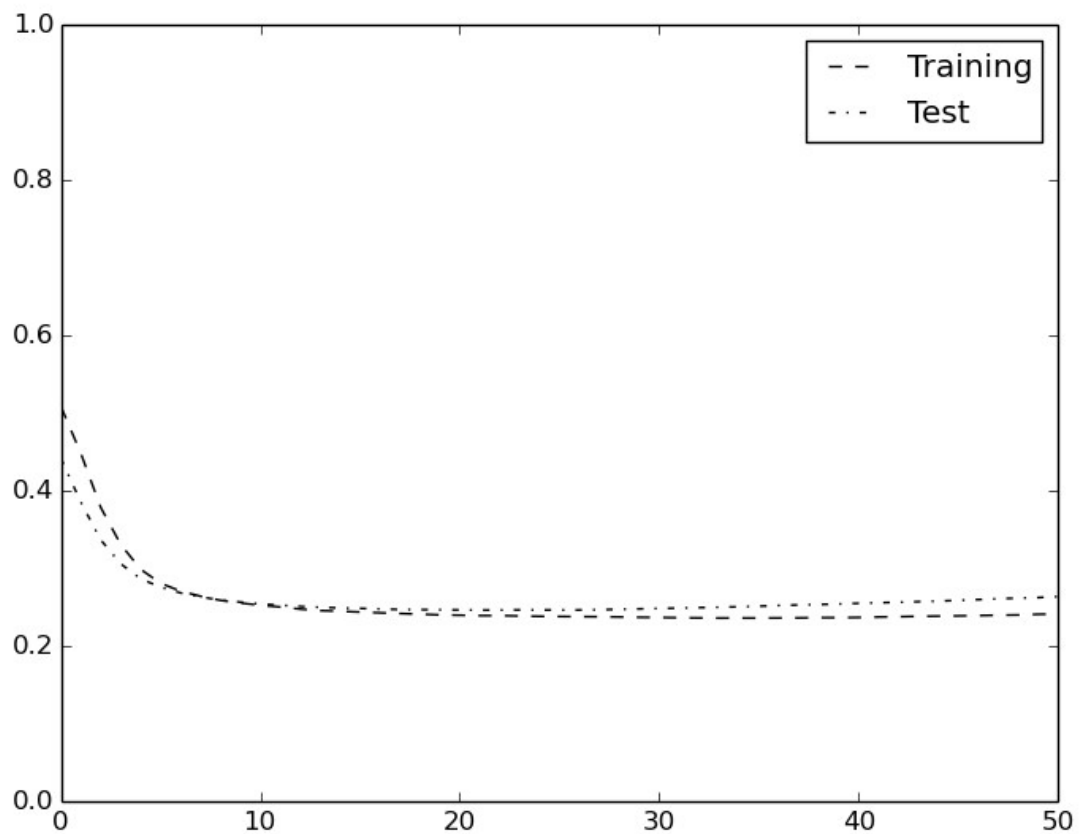
DataLoaderSkeleton

Made function that creates all pairs and eliminate all duplicates.

Extended runRanker to run over several “epochs”.

Made a main that run runranker several times. It also plots the results.

Results



I ran runRanker five times with 50 epochs. This is the average result I got. It seems like after somewhere between 10 and 15 epochs the results seem to level out and barely get any better.

Can also see that from 10 epochs and onwards the program seems to get about 75% right which was the demand from the task.