# WR Experiment result

**Word Embedding:** Elmo, 1024d

**Sentence embedding method**: refer to paper *<<A Simple but Tough-to-Beat Baseline for Sentence Embeddings>>*, so-called WR algorithm.

**Classifier:** MLP, 2 hidden layers with 256 neurons in each layer, optimizer: adam

**Note:** I keep the reviews in train set only when review length<500. Trainset size is 26.5GB, needs text is 1.2GB.

The other 4 types not finished due to memory issue, I’ll update it soon using DLC’s computer.

|  |  |
| --- | --- |
| Type | Results |
| CPU | ndcg:  0.2328767123287671  0.3561643835616438  0.42561000972183705  0.4660960662964885  0.4915280548283061  0.5107467891831461  0.523594969944192  0.5308547548600806  0.5368672252985166  0.5434779660611263  precision:  0.2328767123287671  0.18003913894324852  0.16177429876060012  0.1487279843444227  0.14050880626223092  0.1324200913242009  0.12216941571149008  0.11472602739726027  0.11132854968471406  0.10880626223091977  recall:  0.05821917808219178  0.09001956947162426  0.12133072407045009  0.1487279843444227  0.17563600782778865  0.19863013698630136  0.21379647749510763  0.22945205479452055  0.25048923679060664  0.2720156555772994 |
| RAM | ndcg:  0.5791433891992551  0.7653631284916201  0.842907567478057  0.8661850348896026  0.8838291396896301  precision:  0.5791433891992551  0.38268156424581007  0.29608938547486036  0.23370577281191807  0.1951582867783985  recall:  0.5791433891992551  0.7653631284916201  0.888268156424581  0.9348230912476723  0.9757914338919925 |
| GPU | ndcg:  0.49906890130353815  0.7355679702048417  0.7990134202846536  0.8297396772678939  0.8489877915951967  precision:  0.49906890130353815  0.36778398510242083  0.2787088764742396  0.22439478584729983  0.18845437616387337  recall:  0.49906890130353815  0.7355679702048417  0.8361266294227188  0.8975791433891993  0.9422718808193669 |
| HD | ndcg:  0.41899441340782123  0.659217877094972  0.7496863892458152  0.7859992384078265  0.8100593813169549  precision:  0.41899441340782123  0.329608938547486  0.2675356921166977  0.21880819366852886  0.186219739292365  recall:  0.41899441340782123  0.659217877094972  0.8026070763500931  0.8752327746741154  0.931098696461825 |
| Screen | ndcg:  0.6238361266294227  0.8119180633147114  0.8765384291367422  0.9072646861199826  0.9152847337563587  precision:  0.6238361266294227  0.4059590316573557  0.3047796399751707  0.24394785847299813  0.19888268156424582  recall:  0.6238361266294227  0.8119180633147114  0.9143389199255121  0.9757914338919925  0.994413407821229 |