

Learning sentence representations from natural language inference data

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Github repository link - <https://github.com/ktodorov/uva-semantics-19>

For all models we can observe that hypotheses where almost all of the sentence is similar to the premise the model predicts correctly as entailment but if the differences in the hypothesis become more complex then the models fail to predict correctly

1 Mean encoder

- test macro accuracy: 61.4346%
- test micro accuracy: 61.4413%
- SentEval

	devacc	acc	ndev	ntest
MR	77.87	76.63	10685	10685
CR	80.17	78.47	3775	3775
SUBJ	91.16	91.14	10021	10021
MPQA	87.51	87.57	10606	10606
TREC	73.59	82.6	5452	500
SST2	79.59	79.68	872	1821
MRPC	73.5	73.04	4076	1725

2 Uni-LSTM encoder

- test macro accuracy: 33.7865%
- test micro accuracy: 33.7438%

3 Bi-LSTM encoder

- test macro accuracy: 34.4460%
- test micro accuracy: 34.4258%

4 Bi-LSTM with max-pooling encoder

- test macro accuracy: 37.6724%
- test micro accuracy: 37.6832%