training data

parallel data

| source sentences | reference translations |

(post-editing)

quality estimation data

| source sentences | machine translations | quality annotations |

pipeline

source sentence $(x_1, ..., x_{Tx})$

target sentence $(y_1, ..., y_{Ty})$

RNN-based Word Predictor

QE feature vectors $(v_1, ..., v_{Ty})$

Neural Quality Estimator

QE score (word-, phrase-, sentence-level)