

abstract RISE NER

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Abstract

This work focused on fine-tuning and evaluating two different Named Entity Recognition (NER) systems (A and B) for the English subset of the MultiNERD dataset. For System A and System B, the DistilBERT-base-cased model was fine-tuned on the training set of the MultiNERD dataset for one epoch. System A laid the baseline, while system B was fine-tuned to predict five specific entity types and the 'O' tag included in the dataset. Both systems were evaluated using Accuracy, Precision, Recall, and F1 score. System A showcased an Accuracy score of 99.1%, a Recall score of 95.1%, a Precision score of 94.5%, and an F1 score of 99.1%, whereas system B showcased an Accuracy score of 99.4%, a Precision score of 86.4%, a Recall score of 86.8%, and an F1 score of 86.4%. Given that both systems yield high scores despite training for one epoch, the systems are effective and efficient in performing the task. Although the findings look promising, the systems were evaluated on one dataset and one language, and the hyperparameter-tuning in this work was limited due to time constraints. Therefore, future work should examine the systems' performance on multiple datasets, languages, and tuning of the hyperparameters.