

SMAI Project Report

Team 15

Link to GitHub repository: <https://github.com/lamAdiSri/smai-proj>

Note: Refer to README.md for complete procedure

Preliminary Results

Best validation accuracies for each of the four models

Model	Validation Accuracy
CNN	56.43%
Bi-LSTM	73.54%
Hierarchical Bi-LSTM	77.04 %
Hierarchical Bi-LSTM with Stylometric Features	78.03%

Results regarding Stylometric features

The most discriminating stylometric features were found to be:

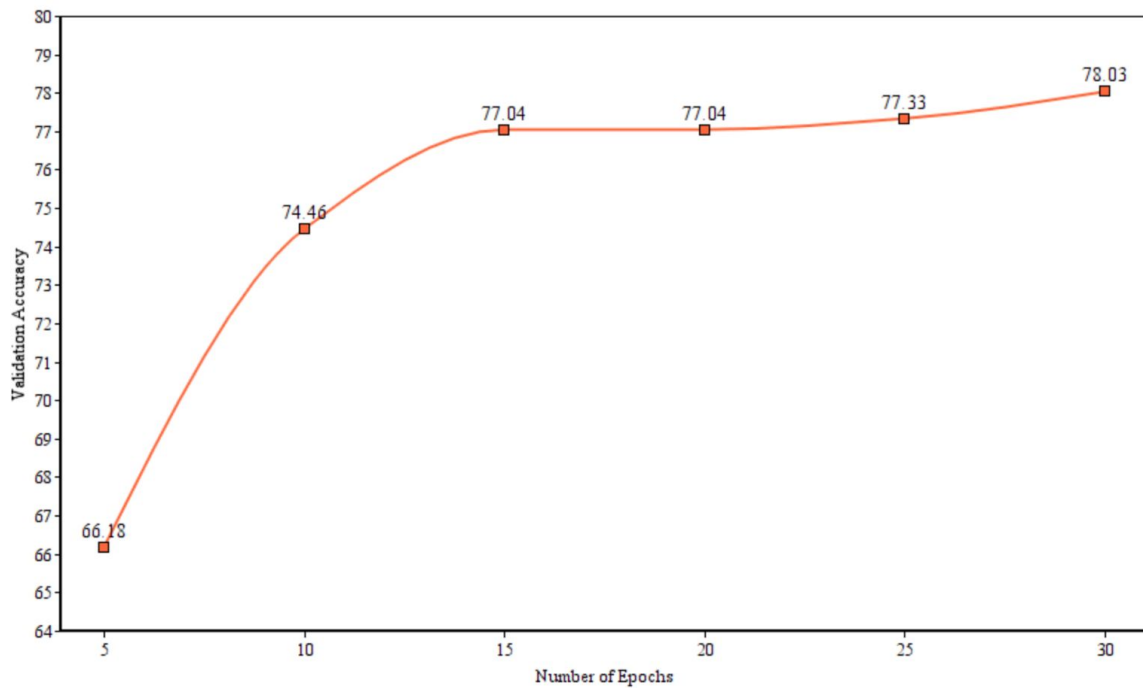
- Ratio of unique words to total words
- Number of adjectives
- Average word-length
- Average sentence-length

Best Validation Accuracies for Different Sets of Stylometric Features

Features considered in model	Validation accuracy
Top-2 stylometric features	77.43%
Top-4 stylometric features	78.03%
Top-6 stylometric features	77.04 %
Top-8 stylometric features	76.98%

Results regarding the final model (Hierarchical Bi-LSTM with 4 best stylometric features)

Graph for the best Validation Accuracy vs Number of Epochs



Graph for the Validation Accuracy vs Back size

