

LSTM Documentation of Accuracy

Accuracy of model for first run using the training data: 97.38%

Accuracy of model for first run using validation data: 88.87%

Accuracy of model for second run using the training data: 96.94%

Nothing was changed in the code, but the slight decrease in accuracy could be a result of the new validation data that was run with the model.

Accuracy of model for third run using the training data: 97.22%

Nothing was changed in the code again, but the slight increase in accuracy could be a result of the model having another run with the training data.

Accuracy of model for second run using validation data: 95.42%

This increase in accuracy from the first run (using the validation data) can be attributed to the change in the number of epochs. We increased the number of epochs in the LSTM model from 10 to 30. In general, increasing the number of epochs helps improve accuracy of the model. However, an excessive number of epochs can lead to overfitting the model, whereas an insufficient number of epochs can cause underfitting the model.

Accuracy of model for fourth run using the training data: 97.13%

Nothing was changed in the code; just retraining the model with the training data. The slight decrease in accuracy could be a result of the new validation data that was run with the model.

Accuracy of model for fifth run using the training data: 97.10%

Nothing was changed in the code; just retraining the model with the training data. Again, the slight decrease in accuracy could be a result of the new validation data that was run with the model.

Accuracy of model for third run using validation data: 95.46%

Nothing was changed in the code; just ran the model again with the validation data. The slight increase in accuracy for the run with validation data could be a result of the model having previous runs with the training data and validation data.

Accuracy of model for first run using test data: 96.95%

Nothing in the code was changed; ran the model using the test data.