

STOCK ANALYSIS AND MOVEMENT PREDICTION USING NEWS HEADLINES

using LSTM MODEL based on Neural Networks in Deep learning

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TESTING

- 1) **Developing training data sets:** This refers to a data set of examples used for training the model. In this data set, you have the input data with the expected output. This data is usually prepared by collecting data in a semi-automated way.
- 2) **Developing test data sets:** This is a subset of the training dataset that is intelligently built to test all the possible combinations and estimates how well your model is trained. The model will be fine-tuned based on the results of the test data set.
- 3) **Developing validation test:** This suites based on algorithms and test datasets. Taking the DNA example, test scenarios include categorizing patient outcomes based on DNA sequences and creating patient risk profiles based on demographics and behaviors

VALIDATION

Machine Learning Model Validation Techniques :

1. Resubstitution
2. Holdout Set Validation Method
3. Cross-Validation Method for Models
4. Leave-One-Out Cross-Validation
5. Random Subsampling Validation
6. Bootstrapping ML Validation Method

CONCLUSION

1. We Trained and Tested on around 1900 records by splitting them in optimal ratio.
2. The opening prices of stocks correctly matched with predicted values nearly 60% of the time.
3. The semantic comparison between actual and predicted prices is depicted using matplotlib tools in python.
4. The current day opening price of the stock as well as DOW JONES are predicted using customised headlines.



THANK YOU!