
Instructions

Saanika Gupta *

Department of Computer Science and Engineering

Dr. Shyama Prasad Mukherjee International Institute of Information Technology, Naya Raipur (IIIT-NR)

1 Libraries Used Along With Versions

- Keras 2.2.4 (1)
- Tensorflow 1.14.0 (2)
- Scikit-Learn 0.21.3 (3)
- NumPy 1.16.4 (4)
- Pandas 0.24.2 (5)
- NLTK 3.2.5 (6)

2 Code execution instructions

Please read the instructions below carefully and follow them meticulously.

- Download the dataset and put it in same folder where Fake_News_Detection.ipynb is placed. Or click on the [colab link](#) and upload the downloaded files (train.xlsx, valid.xlsx and test.xlsx) in the colab.
- Import all the libraries.
- Run the 'Preprocessing' section.
- Six-way classification
 - Run the 'Six-way classification' section.
- Binary Classification
 - Run the 'Binary Classification' section.

References

- [1] F. Chollet *et al.*, "Keras," <https://keras.io>, 2015.
- [2] M. Abadi, A. Agarwal, P. Barham, E. Brevdo, Z. Chen, C. Citro, G. S. Corrado, A. Davis, J. Dean, M. Devin, S. Ghemawat, I. Goodfellow, A. Harp, G. Irving, M. Isard, Y. Jia, R. Jozefowicz, L. Kaiser, M. Kudlur, J. Levenberg, D. Mané, R. Monga, S. Moore, D. Murray, C. Olah, M. Schuster, J. Shlens, B. Steiner, I. Sutskever, K. Talwar, P. Tucker, V. Vanhoucke, V. Vasudevan, F. Viégas, O. Vinyals, P. Warden, M. Wattenberg, M. Wicke, Y. Yu, and X. Zheng, "TensorFlow: Large-scale machine learning on heterogeneous systems," 2015, software available from tensorflow.org. [Online]. Available: <http://tensorflow.org/>
- [3] F. Pedregosa, G. Varoquaux, A. Gramfort, V. Michel, B. Thirion, O. Grisel, M. Blondel, P. Prettenhofer, R. Weiss, V. Dubourg, J. Vanderplas, A. Passos, D. Cournapeau, M. Brucher, M. Perrot, and E. Duchesnay, "Scikit-learn: Machine learning in Python," *Journal of Machine Learning Research*, vol. 12, pp. 2825–2830, 2011.

*Third Year Undergraduate Student in CSE Branch

- [4] T. Oliphant, “NumPy: A guide to NumPy,” USA: Trelgol Publishing, 2006–, [Online; accessed <today>]. [Online]. Available: <http://www.numpy.org/>
- [5] W. McKinney, “Data structures for statistical computing in python,” in *Proceedings of the 9th Python in Science Conference*, S. van der Walt and J. Millman, Eds., 2010, pp. 51 – 56.
- [6] E. Loper and S. Bird, “Nltk: the natural language toolkit,” *arXiv preprint cs/0205028*, 2002.