

DAFTAR PUSTAKA

- [1] B. Liu, *Sentiment Analysis: Mining Opinions, Sentiments, and Emotions*. Cambridge: Cambridge University Press, 2015.
- [2] A. Nazir, Y. Rao, L. Wu, and L. Sun, “Issues and Challenges of Aspect-based Sentiment Analysis: A Comprehensive Survey,” *IEEE Trans. Affect. Comput.*, vol. 13, no. 2, pp. 845–863, 2022, doi: 10.1109/TAFFC.2020.2970399.
- [3] N. I. Widiastuti and M. I. Ali, “Elman Recurrent Neural Network for Aspect Based Sentiment Analysis,” *J. Eng. Sci. Technol.*, vol. 16, no. 3, pp. 1991–2000, 2021.
- [4] A. R. Isnain, A. Sihabuddin, and Y. Suyanto, “Bidirectional Long Short Term Memory Method and Word2vec Extraction Approach for Hate Speech Detection,” *IJCCS (Indonesian J. Comput. Cybern. Syst.)*, vol. 14, no. 2, p. 169, 2020, doi: 10.22146/ijccs.51743.
- [5] W. Yue and L. Li, “Sentiment Analysis using Word2vec-CNN-BiLSTM Classification,” *2020 Seventh Int. Conf. Soc. Networks Anal.*, pp. 1–5, 2020, doi: 10.1109/SNAMS52053.2020.9336549.
- [6] M. T. Ari Bangsa, S. Priyanta, and Y. Suyanto, “Aspect-Based Sentiment Analysis of Online Marketplace Reviews Using Convolutional Neural Network,” *IJCCS (Indonesian J. Comput. Cybern. Syst.)*, vol. 14, no. 2, p. 123, 2020, doi: 10.22146/ijccs.51646.
- [7] B. A. Putra, Y. Kristian, E. I. Setiawan, and J. Santoso, “Aspect based Sentiment Analysis Aduan Mahasiswa UMSIDA Dimasa Pandemi Menggunakan LSTM,” *INSYST J. Intell. Syst. Comput.*, vol. 4, no. 1, pp. 45–54, 2022, doi: 10.52985/insyst.v4i1.229.
- [8] L. Xu, J. Liu, L. Wang, and C. Yin, “Aspect Based Sentiment Analysis for

- Online Reviews,” *Adv. Comput. Sci. Ubiquitous Comput.*, vol. 474, pp. 475–480, 2018, doi: https://doi.org/10.1007/978-981-10-7605-3_78.
- [9] W. L. K. Khine and N. T. T. Aung, “Applying Deep Learning Approach to Targeted Aspect-based Sentiment Analysis for Restaurant Domain,” *2019 Int. Conf. Adv. Inf. Technol. ICAIT 2019*, pp. 206–211, 2019, doi: 10.1109/AITC.2019.8920880.
 - [10] G. Xu, Y. Meng, X. Qiu, Z. Yu, and X. Wu, “Sentiment analysis of comment texts based on BiLSTM,” *IEEE Access*, vol. 7, pp. 51522–51532, 2019, doi: 10.1109/ACCESS.2019.2909919.
 - [11] H. F. Fadli and A. F. Hidayatullah, “Identifikasi Cyberbullying pada Media Sosial Twitter Menggunakan Metode LSTM dan BiLSTM,” *Automata*, vol. 2, no. 1, pp. 57–62, 2021, [Online]. Available: <https://journal.uii.ac.id/AUTOMATA/article/download/17364/10897>.
 - [12] K. S. Nugroho, I. Akbar, A. N. Suksmawati, and I. Istiadi, “Deteksi Depresi dan Kecemasan Pengguna Twitter Menggunakan Bidirectional LSTM,” *4th Conf. Innov. Appl. Sci. Technol. (CIASTECH 2021)*, pp. 287–296, 2021.
 - [13] Y. Zhang and Z. Rao, “N-BiLSTM: BiLSTM with n-gram Features for Text Classification,” *Proc. 2020 IEEE 5th Inf. Technol. Mechatronics Eng. Conf. ITOEC 2020*, pp. 1056–1059, 2020, doi: 10.1109/ITOEC49072.2020.9141692.
 - [14] A. Torfi, R. A. Shirvani, Y. Keneshloo, N. Tavaf, and E. A. Fox, “Natural Language Processing Advancements By Deep Learning: A Survey,” *arXiv*, Mar. 2020, doi: <https://doi.org/10.48550/arXiv.2003.01200>.
 - [15] L. Deng and Y. Liu, *Deep Learning in Natural Language Processing*. Springer Singapore, 2018.
 - [16] A. I. Kadhim, “An Evaluation of Preprocessing Techniques for Text Classification,” *Int. J. Comput. Sci. Inf. Secur.*, vol. 16, no. 6, pp. 22–32, 2018, [Online]. Available: <https://sites.google.com/site/ijcsis/>.

- [17] S. Pradha, M. N. Halgamuge, and N. Tran Quoc Vinh, “Effective text data preprocessing technique for sentiment analysis in social media data,” *Proc. 2019 11th Int. Conf. Knowl. Syst. Eng. KSE 2019*, pp. 1–8, 2019, doi: 10.1109/KSE.2019.8919368.
- [18] A. Bayhaqy, S. Sfenrianto, K. Nainggolan, and E. R. Kaburuan, “Sentiment Analysis about E-Commerce from Tweets Using Decision Tree, K-Nearest Neighbor, and Naïve Bayes,” *2018 Int. Conf. Orange Technol. ICOT 2018*, pp. 1–6, 2018, doi: 10.1109/ICOT.2018.8705796.
- [19] R. Amalia, M. A. Bijaksana, and D. Darmantoro, “Negation handling in sentiment classification using rule-based adapted from Indonesian language syntactic for Indonesian text in Twitter,” *J. Phys. Conf. Ser.*, vol. 971, no. 1, pp. 1–10, 2018, doi: 10.1088/1742-6596/971/1/012039.
- [20] L. Zhang, S. Wang, and B. Liu, “Deep learning for sentiment analysis : A survey,” *WIREs Data Min. Knowl. Discov.*, vol. 8, no. 4, pp. 1–25, 2018, doi: 10.1002/widm.1253.
- [21] N. C. Dang, M. N. Moreno-García, and F. De la Prieta, “Sentiment analysis based on deep learning: A comparative study,” *Electron.*, vol. 9, no. 3, Mar. 2020, doi: 10.3390/electronics9030483.
- [22] A. Zhang, Z. C. Lipton, M. Li, and A. J. Smola, *Dive into Deep Learning*. arXiv preprint arXiv:2106.11342, 2022.
- [23] A. Nurdin, B. A. S. Aji, A. Bustamin, and Z. Abidin, “Perbandingan Kinerja Word Embedding Word2Vec, Glove, Dan Fasttext Pada Klasifikasi Teks,” *J. Tekno Kompak*, vol. 14, no. 2, pp. 74–79, 2020, doi: <https://doi.org/10.33365/jtk.v14i2.732>.
- [24] X. Rong, “word2vec Parameter Learning Explained,” pp. 1–21, 2014, [Online]. Available: <http://arxiv.org/abs/1411.2738>.
- [25] W. Etaiwi, D. Suleiman, and A. Awajan, “Deep Learning Based Techniques for Sentiment Analysis: A Survey,” *Inform.*, vol. 45, no. 7, pp. 89–95, 2021,

- doi: 10.31449/inf.v45i7.3674.
- [26] N. I. Widiastuti, “Deep Learning – Now and Next in Text Mining and Natural Language Processing,” *IOP Conf. Ser. Mater. Sci. Eng.*, vol. 407, no. 1, p. 012114, 2018, doi: 10.1088/1757-899X/407/1/012114.
 - [27] D. Jakhar and I. Kaur, “Artificial intelligence, machine learning and deep learning: definitions and differences,” *Clin. Exp. Dermatol.*, vol. 45, no. 1, pp. 131–132, 2020, doi: <https://doi.org/10.1111/ced.14029>.
 - [28] N. A. Purwitasari and M. Soleh, “Implementasi Algoritma Artificial Neural Network Dalam Pembuatan Chatbot Menggunakan Pendekatan Natural Language Parocessing,” *J. IPTEK*, vol. 6, no. 1, pp. 14–21, 2022, doi: 10.31543/jii.v6i1.192.
 - [29] S. Sharma, S. Sharma, and A. Athaiya, “Activation Functions in Neural Networks,” *Int. J. Eng. Appl. Sci. Technol.*, vol. 04, no. 12, pp. 310–316, 2020, doi: 10.33564/ijeast.2020.v04i12.054.
 - [30] H. H. Do, P. W. C. Prasad, A. Maag, and A. Alsadoon, “Deep Learning for Aspect-Based Sentiment Analysis: A Comparative Review,” *Expert Systems with Applications*, vol. 118. Elsevier Ltd, pp. 272–299, Mar. 15, 2019, doi: 10.1016/j.eswa.2018.10.003.
 - [31] G. Chen, “A Gentle Tutorial of Recurrent Neural Network with Error Backpropagation,” pp. 1–10, 2016, [Online]. Available: <http://arxiv.org/abs/1610.02583>.
 - [32] P. Singh, Ed., *Fundamentals and Methods of Machine and Deep Learning: Algorithms, Tools and Applications*. John Wiley & Sons, Inc., 2022.
 - [33] C. Qian, M. Shi, X. Lv, D. Wu, X. Du, and J. Liu, “Land Subsidence Time Series Prediction Method Based on LSTM-AMSGD,” *J. Phys. Conf. Ser.*, vol. 2404, no. 1, 2022, doi: 10.1088/1742-6596/2404/1/012035.
 - [34] W. Mckinney, *Python for Data Analysis: Data Wrangling with Pandas*,

NumPy, and IPython, Second Edi. Sebastopol: O'Reilly Media, Inc, 2018.

- [35] A. Kulkarni, D. Chong, and F. A. Batarseh, *Foundations of data imbalance and solutions for a data democracy*. Elsevier Inc., 2020.