

DAFTAR PUSTAKA

- [1] F. M. Apriansyah, T. I. Ramadhan, C. R. Hidayat, and A. K. Wijaya, “Perbandingan IndoBERT dan IndoRoBERTa Untuk Analisis Sentimen Pada Film Dokumenter Dirty Vote,” *Jurnal Informatika: Jurnal Pengembangan IT*, vol. 10, no. 3, pp. 593–605, Jul. 2025, doi: 10.30591/jpit.v10i3.8607.
- [2] P. Deski Manalu *et al.*, “Implementasi Algoritma Klasifikasi untuk Analisis Sentimen Media Sosial Tiktok Tahun 2025,” *Jurnal Teknik Informatika dan Teknologi Informasi*, vol. 5, Apr. 2025, doi: 10.55606/jutiti.v5i1.5644.
- [3] M. Jukanti, “Understanding Natural Language Processing (NLP) Techniques,” *JCSTS*, Jul. 2025, doi: 10.32996/jcsts.2025.7.7.112.
- [4] K. Fitriani, “Akar Masalah Penegakan Hukum di Kasus Hogi Minaya,” KBR Media. Accessed: Feb. 23, 2026. [Online]. Available: <https://kbr.id/articles/indeks/akar-masalah-penegakan-hukum-di-kasus-hogi-minaya->
- [5] A. W. W, H. H. Andana, J. Zeniarja, and A. Febriyanto, “Sentiment Analysis of the 2024 General Election Through Twitter using Long-Short-Term Memory Algorithm,” *Journal of Informatics and Web Engineering*, vol. 4, no. 2, pp. 387–400, Jun. 2025, doi: 10.33093/jiwe.2025.4.2.25.
- [6] D. Küçük and F. Can, “A tutorial on stance detection,” *WSDM 2022 - Proceedings of the 15th ACM International Conference on Web Search and Data Mining*, pp. 1626–1628, Feb. 2022, doi: 10.1145/3488560.3501391.
- [7] A. Agung, I. P. Sadhaka, I. Made, A. Dwi Suarjaya, and P. Wira Buana, “Analysis of Indonesian Public Satisfaction Towards Goods Delivery Services using the CNN-LSTM Model,” *Journal of Information Technology and Computer Science*, vol. 10, no. 1, pp. 37–47, 2025, [Online]. Available: www.jitecs.ub.ac.id
- [8] İ. Gül, R. Lebrecht, and K. Aberer, “Stance Detection on Social Media with Fine-Tuned Large Language Models,” Apr. 2024, [Online]. Available: <http://arxiv.org/abs/2404.12171>
- [9] A. Aprinando, P. Simarmata, and T. B. Sasongko, “Sentiment Analysis on BRImo Application Reviews Using IndoBERT,” *Journal of Applied Informatics and Computing (JAIC)*, vol. 9, no. 3, p. 851, 2025, [Online]. Available: <http://jurnal.polibatam.ac.id/index.php/JAIC>

- [10] D. Alfatah, "Penerapan Model Transformer Untuk Deteksi Sentimen Pada Data Twitter Berbahasa Indonesia Application Of Transformer Model For Sentiment Detection On Indonesian Twitter Data," *Jurnal Komputer*, vol. 2, no. 2, pp. 67–70, 2024.
- [11] A. Fernández, S. García, F. Herrera, and N. V Chawla, "SMOTE for Learning from Imbalanced Data: Progress and Challenges, Marking the 15-year Anniversary," *Journal of Artificial Intelligence Research*, vol. 61, pp. 863–905, 2018.
- [12] F. Y. A'la, "Optimasi Klasifikasi Sentimen Ulasan Game Berbahasa Indonesia: IndoBERT dan SMOTE untuk Menangani Ketidakseimbangan Kelas," *Edumatic: Jurnal Pendidikan Informatika*, vol. 9, no. 1, pp. 256–265, Apr. 2025, doi: 10.29408/edumatic.v9i1.29666.
- [13] Anugerah Simanjuntak *et al.*, "Research and Analysis of IndoBERT Hyperparameter Tuning in Fake News Detection," *Jurnal Nasional Teknik Elektro dan Teknologi Informasi*, vol. 13, no. 1, pp. 60–67, Feb. 2024, doi: 10.22146/jnteti.v13i1.8532.
- [14] E. Elgeldawi, A. Sayed, A. R. Galal, and A. M. Zaki, "Hyperparameter tuning for machine learning algorithms used for arabic sentiment analysis," *MDPI*, vol. 8, no. 4, Dec. 2021, doi: 10.3390/informatics8040079.
- [15] R. Randy Suryono, "Sentiment Classification of Indonesian-Language Roblox Reviews Using IndoBERT with SMOTE Optimization," *Journal of Applied Informatics and Computing (JAIC)*, vol. 9, no. 4, p. 1868, 2025, [Online]. Available: <http://jurnal.polibatam.ac.id/index.php/JAIC>
- [16] Istiqomah and A. H. Lubis, "Sentiment Analysis on TikTok Discourse Surrounding the 2024 North Sumatra Gubernatorial Election Using Support Vector Machine Algorithm," vol. 7, Jul. 2025, doi: 10.47709/cnahpc.v7i3.6543.
- [17] J. C. Setiawan, K. M. Lhaksmana, and B. Bunyamin, "Sentiment Analysis of Indonesian TikTok Review Using LSTM and IndoBERTweet Algorithm," *JIPPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika)*, vol. 8, no. 3, pp. 774–780, Aug. 2023, doi: 10.29100/jipi.v8i3.3911.
- [18] P. Jain, A. Dubey, D. Gupta, and D. Joshi, *Advancements and Challenges in Natural Language Processing: Bridging Human Communication and Artificial Intelligence*. 2025. [Online]. Available: <http://dsea.gitjaipur.com/>

- [19] Dr. D. Patterson, Dr. D. Knuth, and Dr. M. Imran, “Natural Language Processing in AI: Achievements and Challenges,” *AlgoVista: Journal of AI & Computer Science*, vol. 1, no. 2, 2024.
- [20] A. A. Abro, M. S. H. Talpur, and A. K. Jumani, “Natural Language Processing Challenges and Issues: A Literature Review,” Dec. 01, 2023, *Gazi Universitesi*. doi: 10.35378/gujs.1032517.
- [21] D. Saini and D. Saini, “A Review of Natural Language Processing Techniques in Word Processing Applications,” *International Scientific Journal of Engineering and Management*, vol. 04, no. 04, pp. 1–9, Apr. 2025, doi: 10.55041/isjem02771.
- [22] Miss. A. A. S. Ali, “AI-Natural Language Processing (NLP),” *Int. J. Res. Appl. Sci. Eng. Technol.*, vol. 9, no. VIII, pp. 135–140, Aug. 2021, doi: 10.22214/ijraset.2021.37293.
- [23] G. Muhammad Ilham, R. Santoso, S. Lestari, and P. Rosyani, “Penerapan Named Entity Recognition pada Teks Media Sosial Bahasa Indonesia Menggunakan BiLSTM-CRF,” *Jurnal Artificial Inteligent dan Sistem Penunjang Keputusan*, vol. 3, no. 2, 2025, [Online]. Available: <https://jurnalmahasiswa.com/index.php/aidanspk>
- [24] C. Janiesch, P. Zschech, and K. Heinrich, “Machine learning and deep learning,” Apr. 2021, doi: 10.1007/s12525-021-00475-2/Published.
- [25] M. Burnham, “Stance detection: A practical guide to classifying political beliefs in text,” *Political Sci. Res. Methods*, vol. 13, no. 3, pp. 611–628, Jul. 2025, doi: 10.1017/psrm.2024.35.
- [26] T. B. Brown *et al.*, “Language Models are Few-Shot Learners,” Jul. 2020, [Online]. Available: <http://arxiv.org/abs/2005.14165>
- [27] Z. Tan *et al.*, “Large Language Models for Data Annotation and Synthesis: A Survey,” Dec. 2024, [Online]. Available: <http://arxiv.org/abs/2402.13446>
- [28] F. Gilardi, M. I. Alizadeh, and M. I. Kubli, “ChatGPT outperforms crowd workers for text-annotation tasks,” vol. 120, 2023, doi: 10.1073/pnas.
- [29] I. J. Cruickshank and L. H. X. Ng, “Prompting and Fine-Tuning Open-Sourced Large Language Models for Stance Classification,” Mar. 2024, [Online]. Available: <http://arxiv.org/abs/2309.13734>
- [30] F. S. Marcondes, A. De, C. O. S. Gala, M. Rodrigues, J. J. Almeida, and P. Novais, “Lexicon Annotation with LLM: a proof of concept with ChatGPT,” *Lecture Notes in Computer Science (LNAI)*, vol. 14858, pp. 190–200, 2024.

- [31] S. Islam *et al.*, “A Comprehensive Survey on Applications of Transformers for Deep Learning Tasks,” Jun. 2023, [Online]. Available: <http://arxiv.org/abs/2306.07303>
- [32] C. K. Joshi, “Transformers are Graph Neural Networks,” Jun. 2025, [Online]. Available: <http://arxiv.org/abs/2506.22084>
- [33] J. Devlin, M.-W. Chang, K. Lee, K. T. Google, and A. I. Language, “BERT: Pre-training of Deep Bidirectional Transformers for Language Understanding,” pp. 4171–4186, Jun. 2019, [Online]. Available: <https://github.com/tensorflow/tensor2tensor>
- [34] N. K. Nissa and E. Yulianti, “Multi-label text classification of Indonesian customer reviews using bidirectional encoder representations from transformers language model,” *International Journal of Electrical and Computer Engineering*, vol. 13, no. 5, pp. 5641–5652, Oct. 2023, doi: 10.11591/ijece.v13i5.pp5641-5652.
- [35] B. Wilie *et al.*, “IndoNLU: Benchmark and Resources for Evaluating Indonesian Natural Language Understanding,” 2020. [Online]. Available: <https://github.com/annisanurulazhar/absa-playground>
- [36] J. I. T. Krisna, A. Luthfiarta, L. D. Cahya, S. Winarno, and A. Nugraha, “Comparing Optimizer Strategies For Enhancing Emotion Classification In IndoBERT Models,” *Advance Sustainable Science, Engineering and Technology*, vol. 6, no. 2, Feb. 2024, doi: 10.26877/asset.v6i2.18228.
- [37] F. Dwi Astuti and F. Nova Lenti, “Implementasi SMOTE untuk mengatasi Imbalance Class pada Klasifikasi Car Evolution menggunakan K-NN,” *JUPITER (Jurnal Penelitian Mahasiswa Teknik dan Ilmu Komputer)*, pp. 89–98, Apr. 2021.
- [38] A. Ariansyah and U. Indahyanti, “Fitur Ekstraksi pada Pemodelan Topik Menggunakan Metode Latent Dirichlet Allocation pada Peristiwa Kebocoran Data,” *Indonesian Journal of Applied Technology*, vol. 1, no. 2, p. 24, Jul. 2024, doi: 10.47134/ijat.v1i2.3041.