

## DAFTAR PUSTAKA

- [1] R. H. Riasari, “Penerapan Prinsip Kesetaraan dalam Pemberian Hak Bagi Peserta BPJS Kesehatan Berdasarkan Peraturan Presiden Nomor 82 Tahun 2018 tentang Jaminan Kesehatan,” *J. Supremasi*, pp. 37–52, Sep. 2022, doi: 10.35457/supremasi.v12i2.1868.
- [2] R. Amanillah, T. Trimono, and A. Terza Damaliana, “ANALISIS FAKTOR YANG MEMPENGARUHI KEPUASAN PESERTA BPJS KESEHATAN PADA RUMAH SAKIT WILAYAH SURABAYA DENGAN PENDEKATAN ANALISIS SENTIMEN,” *JATI J. Mhs. Tek. Inform.*, vol. 9, no. 3, pp. 3721–3729, May 2025, doi: 10.36040/jati.v9i3.13393.
- [3] I. E. Chaniotakis and C. Lymperopoulos, “Service quality effect on satisfaction and word of mouth in the health care industry,” *Manag. Serv. Qual. Int. J.*, vol. 19, no. 2, pp. 229–242, Mar. 2009, doi: 10.1108/09604520910943206.
- [4] V. Frisda Anintya *et al.*, “Evaluasi, perubahan dan kontinuitas kebijakan: studi kasus kebijakan Pilkada serentak 2020 di Bandar Lampung,” *J. Studi Ilmu Sos. Dan Polit.*, vol. 1, no. 1, pp. 1–20, Jun. 2021, doi: 10.35912/jasipol.v1i1.160.
- [5] N. Sarina, A. R. Amelia, and W. Hamzah, “Analisis Rujukan Penyakit Non Spesialistik Ke Fasilitas Kesehatan Tingkat Lanjut Pada Puskesmas di Kabupaten Polewali Mandar,” *J. Aqfiah Health Res. JAHR*, vol. 4, no. 2, Art. no. 2, Dec. 2023, doi: 10.52103/jahr.v4i2.1557.
- [6] A. H. Wibowo and S. Lukas, “EVALUASI PENGOBATAN PADA PASIEN INFEKSI SALURAN PERNAFASAN AKUT (ISPA) DI PUSKESMAS PASAR REBO PADA BULAN JULI-OKTOBER 2023,” *Seroja Husada J. Kesehat. Masy.*, vol. 1, no. 5, Art. no. 5, Aug. 2024, doi: 10.572349/serojahusada.v1i5.3307.
- [7] L. F. Luna-Reyes, “Opportunities and challenges for digital governance in a world of digital participation,” *Inf. Polity*, vol. 22, no. 2–3, pp. 197–205, Oct. 2017, doi: 10.3233/IP-170408.
- [8] F. F. Mailoa, “Analisis sentimen data twitter menggunakan metode text mining tentang masalah obesitas di indonesia,” *J. Inf. Syst. Public Health*, vol. 6, no. 1, p. 44, Oct. 2021, doi: 10.22146/jisph.44455.
- [9] B. Liu and L. Zhang, “A Survey of Opinion Mining and Sentiment Analysis,” in *Mining Text Data*, C. C. Aggarwal and C. Zhai, Eds., Boston, MA: Springer US, 2012, pp. 415–463. doi: 10.1007/978-1-4614-3223-4\_13.
- [10] “Analisis Sentimen Berdasarkan Opini Pengguna pada Media Twitter Terhadap BPJS Menggunakan Metode Lexicon Based dan Naïve Bayes Classifier,” *J. Ilm. Komputasi*, vol. 20, no. 1, Mar. 2021, doi: 10.32409/jikstik.20.1.401.

- [11] G. R. Ditami, E. F. Ripanti, and H. Sujaini, "Implementasi Support Vector Machine untuk Analisis Sentimen Terhadap Pengaruh Program Promosi Event Belanja pada Marketplace," *JEPIN J. Edukasi Dan Penelit. Inform.*, vol. 8, no. 3, Art. no. 3, Dec. 2022, doi: 10.26418/jp.v8i3.56478.
- [12] F. N. Hidayat and S. Sugiyono, "Analisis Sentimen Masyarakat Terhadap Perekrutan Pppk Pada Twitter Dengan Metode Naive Bayes Dan Support Vector Machine," *J. Sains Dan Teknol.*, vol. 5, no. 2, pp. 665–672, Dec. 2023, doi: 10.55338/saintek.v5i2.1359.
- [13] P. Arsi and R. Waluyo, "Analisis sentimen wacana pemindahan ibu kota Indonesia menggunakan algoritma Support Vector Machine (SVM)," *J Teknol Inf Dan Ilmu Komput*, vol. 8, no. 1, p. 147, 2021.
- [14] R. Moraes, J. F. Valiati, and W. P. Gavião Neto, "Document-level sentiment classification: An empirical comparison between SVM and ANN," *Expert Syst. Appl.*, vol. 40, no. 2, pp. 621–633, Feb. 2013, doi: 10.1016/j.eswa.2012.07.059.
- [15] A. Purwarianti and I. A. P. A. Crisdayanti, "Improving Bi-LSTM Performance for Indonesian Sentiment Analysis Using Paragraph Vector," in *2019 International Conference of Advanced Informatics: Concepts, Theory and Applications (ICAICTA)*, Yogyakarta, Indonesia: IEEE, Sep. 2019, pp. 1–5. doi: 10.1109/ICAICTA.2019.8904199.
- [16] Z. Ardika and A. D. Wowor, "ANALISIS SENTIMEN MASYARAKAT TERHADAP PROGRAM BADAN PENYELENGGARA JAMINAN SOSIAL (BPJS) MENGGUNAKAN DATA TWITTER," *JIPI J. Ilm. Penelit. Dan Pembelajaran Inform.*, vol. 9, no. 1, pp. 90–99, Feb. 2024, doi: 10.29100/jipi.v9i1.4272.
- [17] R. Puspita and A. Widodo, "Perbandingan Metode KNN, Decision Tree, dan Naïve Bayes Terhadap Analisis Sentimen Pengguna Layanan BPJS," *J. Inform. Univ. Pamulang*, vol. 5, no. 4, p. 646, Dec. 2021, doi: 10.32493/informatika.v5i4.7622.
- [18] M. A. Laagu and A. Setyo Arifin, "Analysis the Issue of Increasing National Health Insurance (BPJS Kesehatan) Rates through Community Perspectives on Social Media: A Case Study of Drone Emprit," in *2020 International Conference on Smart Technology and Applications (ICoSTA)*, Surabaya, Indonesia: IEEE, Feb. 2020, pp. 1–7. doi: 10.1109/ICoSTA48221.2020.1570615599.
- [19] M. K. Anam, M. I. Mahendra, W. Agustin, R. Rahmaddeni, and N. Nurjayadi, "Framework for Analyzing Netizen Opinions on BPJS Using Sentiment Analysis and Social Network Analysis (SNA)," *INTENSIF J. Ilm. Penelit. Dan Penerapan Teknol. Sist. Inf.*, vol. 6, no. 1, pp. 11–28, Feb. 2022, doi: 10.29407/intensif.v6i1.15870.

- [20] D. Damayanti, D. Indriya Efendi, D. Solihudin, C. L. Rohmat, and S. Eka Permana, "PEMETAAN OPINI PUBLIK TERHADAP PERUBAHAN KEBIJAKAN BPJS KESEHATAN DENGAN PENDEKATAN SUPPORT VECTOR MACHINE(SVM) DALAM ANALISIS SENTIMEN," *JATI J. Mhs. Tek. Inform.*, vol. 8, no. 1, pp. 88–94, Feb. 2024, doi: 10.36040/jati.v8i1.8304.
- [21] M. Q. Huzyan Octava, D. G. Prasetyo Putri, F. M. Hilmy, U. Farooq, R. A. Nurhaliza, and G. Alfian, "Web-based Sentiment Analysis System Using SVM and TF-IDF with Statistical Feature," in *2023 International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT)*, Sakheer, Bahrain: IEEE, Nov. 2023, pp. 9–14. doi: 10.1109/3ICT60104.2023.10391734.
- [22] D. I. N. Afra *et al.*, "Developing Sentiment Analysis of Indonesian Social Media Based on Convolutional Neural Network for Smarter Society," in *2022 International Conference on ICT for Smart Society (ICISS)*, Bandung, Indonesia: IEEE, Aug. 2022, pp. 1–7. doi: 10.1109/ICISS55894.2022.9915148.
- [23] A. Irianti, H. Halimah, S. Sutedi, and M. Agariana, "Integration of BERT and SVM in Sentiment Analysis of Twitter/X Regarding Constitutional Court Decision No. 60/PUU-XXII/2024," *J. Tek. Inform. Jutif*, vol. 6, no. 2, pp. 469–482, Apr. 2025, doi: 10.52436/1.jutif.2025.6.2.4068.
- [24] I. S. K. Idris, Y. A. Mustofa, and I. A. Salihi, "Analisis Sentimen Terhadap Penggunaan Aplikasi Shopee Menggunakan Algoritma Support Vector Machine (SVM)," *Jambura J. Electr. Electron. Eng.*, vol. 5, no. 1, pp. 32–35, Jan. 2023, doi: 10.37905/jjee.v5i1.16830.
- [25] H. Tuhuteru, "Analisis Sentimen Masyarakat Terhadap Pembatasan Sosial Berskala Besar Menggunakan Algoritma Support Vector Machine," *J. Inf. Syst. Dev. ISD*, vol. 5, no. 2, Art. no. 2, Jun. 2020, Accessed: Jul. 04, 2025. [Online]. Available: <https://ejournal-medan.uph.edu/isd/article/view/381>
- [26] H. Imaduddin, F. Y. A'la, and Y. S. Nugroho, "Sentiment Analysis in Indonesian Healthcare Applications using IndoBERT Approach," *Int. J. Adv. Comput. Sci. Appl.*, vol. 14, no. 8, 2023, doi: 10.14569/IJACSA.2023.0140813.
- [27] S. Imron, E. I. Setiawan, and J. Santoso, "Deteksi Aspek Review E-Commerce Menggunakan IndoBERT Embedding dan CNN," *J. Intell. Syst. Comput.*, vol. 5, no. 1, pp. 10–16, Apr. 2023, doi: 10.52985/insyst.v5i1.267.
- [28] G. Z. Nabiilah, I. N. Alam, E. S. Purwanto, and M. F. Hidayat, "Indonesian multilabel classification using IndoBERT embedding and MBERT classification," *Int. J. Electr. Comput. Eng. IJECE*, vol. 14, no. 1, p. 1071, Feb. 2024, doi: 10.11591/ijece.v14i1.pp1071-1078.

- [29] J. Pranata, S. Agustian, J. Jasril, and E. Haerani, "Penggunaan Model Bahasa indoBERT pada metode Random Forest untuk Klasifikasi Sentimen dengan Dataset Terbatas," *Build. Inform. Technol. Sci. BITS*, vol. 6, no. 3, pp. 1668–1676, Dec. 2024, doi: 10.47065/bits.v6i3.6335.
- [30] G. T. Fadilah, L. Muflikhah, and R. S. Perdana, "Analisis Sentimen Produk Hijab Pada E-Commerce Tokopedia Menggunakan Algoritma Support Vector Machine dan IndoBERT Embedding," *J. Pengemb. Teknol. Inf. Dan Ilmu Komput.*, vol. 9, no. 2, 2025.
- [31] I. El Naqa and M. J. Murphy, "What Is Machine Learning?," in *Machine Learning in Radiation Oncology*, I. El Naqa, R. Li, and M. J. Murphy, Eds., Cham: Springer International Publishing, 2015, pp. 3–11. doi: 10.1007/978-3-319-18305-3\_1.
- [32] Z.-H. Zhou, *Machine Learning*. Singapore: Springer Singapore, 2021. doi: 10.1007/978-981-15-1967-3.
- [33] J. G. Carbonell, R. S. Michalski, and T. M. Mitchell, "AN OVERVIEW OF MACHINE LEARNING," in *Machine Learning*, Elsevier, 1983, pp. 3–23. doi: 10.1016/B978-0-08-051054-5.50005-4.
- [34] T. Oladipupo, "Types of Machine Learning Algorithms," in *New Advances in Machine Learning*, Y. Zhang, Ed., InTech, 2010. doi: 10.5772/9385.
- [35] F. A. Pozzi, E. Fersini, E. Messina, and B. Liu, "Challenges of Sentiment Analysis in Social Networks," in *Sentiment Analysis in Social Networks*, Elsevier, 2017, pp. 1–11. doi: 10.1016/B978-0-12-804412-4.00001-2.
- [36] Md. Al-Amin, Md. S. Islam, and S. Das Uzzal, "Sentiment analysis of Bengali comments with Word2Vec and sentiment information of words," in *2017 International Conference on Electrical, Computer and Communication Engineering (ECCE)*, Cox's Bazar, Bangladesh: IEEE, Feb. 2017, pp. 186–190. doi: 10.1109/ECACE.2017.7912903.
- [37] B. Liu, "Many Facets of Sentiment Analysis," in *A Practical Guide to Sentiment Analysis*, vol. 5, E. Cambria, D. Das, S. Bandyopadhyay, and A. Feraco, Eds., in *Socio-Affective Computing*, vol. 5, Cham: Springer International Publishing, 2017, pp. 11–39. doi: 10.1007/978-3-319-55394-8\_2.
- [38] W. Medhat, A. Hassan, and H. Korashy, "Sentiment analysis algorithms and applications: A survey," *Ain Shams Eng. J.*, vol. 5, no. 4, pp. 1093–1113, Dec. 2014, doi: 10.1016/j.asej.2014.04.011.
- [39] L. Yue, W. Chen, X. Li, W. Zuo, and M. Yin, "A survey of sentiment analysis in social media," *Knowl. Inf. Syst.*, vol. 60, no. 2, pp. 617–663, Aug. 2019, doi: 10.1007/s10115-018-1236-4.

- [40] A. Famili, W. Shen, R. Weber, and E. Simoudis, “Data preprocessing and intelligent data analysis,” *Intell. Data Anal.*, vol. 1, no. 1–4, pp. 3–23, 1997, doi: 10.1016/S1088-467X(98)00007-9.
- [41] D. Pyle, “Data Mining,” in *Business Modeling and Data Mining*, Elsevier, 2003, p. 273. doi: 10.1016/B978-155860653-1.50011-7.
- [42] S. Ramírez-Gallego, B. Krawczyk, S. García, M. Woźniak, and F. Herrera, “A survey on data preprocessing for data stream mining: Current status and future directions,” *Neurocomputing*, vol. 239, pp. 39–57, May 2017, doi: 10.1016/j.neucom.2017.01.078.
- [43] D. T. Larose, *Discovering Knowledge in Data: An Introduction to Data Mining*, 1st ed. Wiley, 2004. doi: 10.1002/0471687545.
- [44] Venkata Mahesh Babu Batta, “Human Language Data Processing using NLTK,” *Int. J. Adv. Res. Sci. Commun. Technol.*, pp. 628–634, Apr. 2024, doi: 10.48175/IJARSCT-17685.
- [45] M. A. Rosid, A. S. Fitriani, I. R. I. Astutik, N. I. Mulloh, and H. A. Gozali, “Improving Text Preprocessing For Student Complaint Document Classification Using Sastrawi,” *IOP Conf. Ser. Mater. Sci. Eng.*, vol. 874, no. 1, p. 012017, Jun. 2020, doi: 10.1088/1757-899X/874/1/012017.
- [46] T. Agrawal, “Hyperparameter Optimization Using Scikit-Learn,” in *Hyperparameter Optimization in Machine Learning*, Berkeley, CA: Apress, 2021, pp. 31–51. doi: 10.1007/978-1-4842-6579-6\_2.
- [47] P. P. Ippolito, “Hyperparameter Tuning: The Art of Fine-Tuning Machine and Deep Learning Models to Improve Metric Results,” in *Applied Data Science in Tourism*, R. Egger, Ed., in *Tourism on the Verge.*, Cham: Springer International Publishing, 2022, pp. 231–251. doi: 10.1007/978-3-030-88389-8\_12.
- [48] J. A. Ilemobayo *et al.*, “Hyperparameter Tuning in Machine Learning: A Comprehensive Review,” *J. Eng. Res. Rep.*, vol. 26, no. 6, pp. 388–395, Jun. 2024, doi: 10.9734/jerr/2024/v26i61188.
- [49] P. P. Ippolito, “Hyperparameter Tuning: The Art of Fine-Tuning Machine and Deep Learning Models to Improve Metric Results,” in *Applied Data Science in Tourism*, R. Egger, Ed., in *Tourism on the Verge.*, Cham: Springer International Publishing, 2022, pp. 231–251. doi: 10.1007/978-3-030-88389-8\_12.
- [50] Anugerah Simanjuntak *et al.*, “Research and Analysis of IndoBERT Hyperparameter Tuning in Fake News Detection,” *J. Nas. Tek. Elektro Dan Teknol. Inf.*, vol. 13, no. 1, pp. 60–67, Feb. 2024, doi: 10.22146/jnteti.v13i1.8532.

- [51] R. Atenstaedt, “Word cloud analysis of the *BJGP* : 5 years on,” *Br. J. Gen. Pract.*, vol. 67, no. 658, pp. 231–232, May 2017, doi: 10.3399/bjgp17X690833.
- [52] N. A. Poedjimarjo, D. Pramesti, and R. Y. Fa’rifah, “Sentiment analysis on public opinion of electric vehicles usage in Indonesia using support vector machine algorithms,” *Tek. J. Sains Dan Teknol.*, vol. 19, no. 2, p. 152, Sep. 2023, doi: 10.36055/tjst.v19i2.21967.
- [53] “(PDF) Natural Language Processing with Python,” ResearchGate. Accessed: Jul. 04, 2025. [Online]. Available: [https://www.researchgate.net/publication/220691633\\_Natural\\_Language\\_Processing\\_with\\_Python](https://www.researchgate.net/publication/220691633_Natural_Language_Processing_with_Python)
- [54] S. Riyanto, I. S. Sitanggang, T. Djatna, and T. D. Atikah, “Comparative Analysis using Various Performance Metrics in Imbalanced Data for Multi-class Text Classification,” *Int. J. Adv. Comput. Sci. Appl.*, vol. 14, no. 6, 2023, doi: 10.14569/ijacsa.2023.01406116.
- [55] Y.-L. Chen, C.-L. Chang, and C.-S. Yeh, “Emotion classification of YouTube videos,” *Decis. Support Syst.*, vol. 101, pp. 40–50, Sep. 2017, doi: 10.1016/j.dss.2017.05.014.
- [56] M. Alkaff, A. Rizky Baskara, and Y. Hendro Wicaksono, “Sentiment Analysis of Indonesian Movie Trailer on YouTube Using Delta TF-IDF and SVM,” in *2020 Fifth International Conference on Informatics and Computing (ICIC)*, Gorontalo, Indonesia: IEEE, Nov. 2020, pp. 1–5. doi: 10.1109/ICIC50835.2020.9288579.
- [57] M. Z. Asghar, S. Ahmad, A. Marwat, F. M. Kundi, D. I. Khan, and S. Arabia, “Sentiment Analysis on Youtube: A Brief Survey,” *PP*.
- [58] A. Fahrni and M. Klenner, “Old wine or warm beer: target-specific sentiment analysis of adjectives,” in *Fahrni, A; Klenner, M (2008). Old wine or warm beer: target-specific sentiment analysis of adjectives. In: Symposium on Affective Language in Human and Machine, AISB 2008 Convention, Aberdeen, Scotland, 1 April 2008 - 2 April 2008, 60-63.*, Aberdeen, Scotland: University of Zurich, Apr. 2008, pp. 60–63. doi: 10.5167/uzh-8810.
- [59] A. Bermingham, M. Conway, L. McInerney, N. O’Hare, and A. F. Smeaton, “Combining Social Network Analysis and Sentiment Analysis to Explore the Potential for Online Radicalisation,” in *2009 International Conference on Advances in Social Network Analysis and Mining*, Athens, Greece: IEEE, Jul. 2009, pp. 231–236. doi: 10.1109/asonam.2009.31.
- [60] D. Wijonarko and B. W. R. Mulya, “Pengembangan Antarmuka Pemrograman Aplikasi Menggunakan Metode RESTful pada Sistem Informasi Akademik Politeknik Kota Malang,” *SMATIKA J.*, vol. 8, no. 02, pp. 63–66, Oct. 2018, doi: 10.32664/smatika.v8i02.202.

- [61] S. Pawar, S. K, and G. Laxmi, “Application Programming Interface with a Case Study of SOA,” in *2023 International Conference on Integrated Intelligence and Communication Systems (ICIICS)*, Kalaburagi, India: IEEE, Nov. 2023, pp. 1–5. doi: 10.1109/ICIICS59993.2023.10421593.
- [62] Ilmu Komputer, Universitas Lampung, B. Adi Pranata, A. Hijriani, and A. Junaidi, “PERANCANGAN APPLICATION PROGRAMMING INTERFACE (API) BERBASIS WEB MENGGUNAKAN GAYA ARSITEKTUR REPRESENTATIONAL STATE TRANSFER (REST) UNTUK PENGEMBANGAN SISTEM INFORMASI ADMINISTRASI PASIEN KLINIK PERAWATAN KULIT,” *J. Komputasi*, vol. 6, no. 1, pp. 33–42, Apr. 2018, doi: 10.23960/komputasi.v6i1.1554.
- [63] H. Sifaou, A. Kammoun, and M.-S. Alouini, “Phase transition in the hard-margin support vector machines,” in *2019 IEEE 8th International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP)*, Le Gosier, Guadeloupe: IEEE, Dec. 2019, pp. 415–419. doi: 10.1109/CAMSAP45676.2019.9022461.
- [64] M. Premalatha and C. Vijaya Lakshmi, “SVM TRADE-OFF BETWEEN MAXIMIZE THE MARGIN AND MINIMIZE THE VARIABLES USED FOR REGRESSION,” *Int. J. Pure Applied Math.*, vol. 87, no. 6, Oct. 2013, doi: 10.12732/ijpam.v87i6.2.
- [65] Z. Alhaq, A. Mustopa, S. Mulyatun, and J. D. Santoso, “PENERAPAN METODE SUPPORT VECTOR MACHINE UNTUK ANALISIS SENTIMEN PENGGUNA TWITTER,” *J. Inf. Syst. Manag. JOISM*, vol. 3, no. 2, pp. 44–49, Jul. 2021, doi: 10.24076/joism.2021v3i2.558.
- [66] “View of Analisis dan Penerapan Algoritma Support Vector Machine (SVM) dalam Data Mining untuk Menunjang Strategi Promosi.” Accessed: Jul. 04, 2025. [Online]. Available: <https://jurnalnasional.ump.ac.id/index.php/JUITA/article/view/4378/2817>
- [67] M. Sabzekar, M. Naghibzadeh, H. S. Yazdi, and S. Effati, “Emphatic Constraints Support Vector Machines for Multi-class Classification,” in *2009 Third UKSim European Symposium on Computer Modeling and Simulation*, Athens, Greece: IEEE, 2009, pp. 118–123. doi: 10.1109/EMS.2009.61.
- [68] J. Watkins, *Testing IT: An Off-the-Shelf Software Testing Process*, 1st ed. Cambridge University Press, 2001. doi: 10.1017/CBO9780511547041.
- [69] P. Pandit and S. Tahiliani, “AgileUAT: A Framework for User Acceptance Testing based on User Stories and Acceptance Criteria,” *Int. J. Comput. Appl.*, vol. 120, no. 10, pp. 16–21, Jun. 2015, doi: 10.5120/21262-3533.
- [70] H. L. Hakim, D. Faqih, D. Deva, I. F. Hudaya, and M. N. Ilyas, “Pengujian Alpha dan Beta Testing Pada Aplikasi TIJE,” *TeknoIS J. Ilm. Teknol. Inf. Dan Sains*, vol. 14, no. 2, pp. 285–295, Jul. 2024, doi: 10.36350/jbs.v14i2.265.

- [71] E. C. D. Santos, P. Vilain, and D. H. Longo, “A systematic literature review to support the selection of user acceptance testing techniques,” in *Proceedings of the 40th International Conference on Software Engineering: Companion Proceedings*, Gothenburg Sweden: ACM, May 2018, pp. 418–419. doi: 10.1145/3183440.3195036.
- [72] E. C. D. Santos, P. Vilain, and D. H. Longo, “A systematic literature review to support the selection of user acceptance testing techniques,” in *Proceedings of the 40th International Conference on Software Engineering: Companion Proceedings*, Gothenburg Sweden: ACM, May 2018, pp. 418–419. doi: 10.1145/3183440.3195036.
- [73] J. Einstein, V. R. Bulu, and R. L. Nahak, “Pengembangan Media Pembelajaran Game Edukasi Bilangan Pangkat dan Akar menggunakan Genially,” *J. JENDELA Pendidik.*, vol. 2, no. 01, pp. 101–109, Feb. 2022, doi: 10.57008/jjp.v2i01.150.
- [74] J. Devlin, M.-W. Chang, K. Lee, and K. Toutanova, “Pre-training of Deep Bidirectional Transformers for Language Understanding,” in *Proceedings of the 2019 Conference of the North*, Minneapolis, Minnesota: Association for Computational Linguistics, 2019, pp. 4171–4186. doi: 10.18653/v1/N19-1423.
- [75] J. Devlin, M.-W. Chang, K. Lee, and K. Toutanova, “BERT: Pre-training of Deep Bidirectional Transformers for Language Understanding,” in *Proceedings of the 2019 Conference of the North*, Minneapolis, Minnesota: Association for Computational Linguistics, 2019, pp. 4171–4186. doi: 10.18653/v1/N19-1423.
- [76] A. Putra, Ismarmiaty, and Apriani, “Pengukuran Tingkat Akurasi Pada Ulasan E-Commerce Menggunakan Metode INDOBERT Dengan Optimizer Adam,” *J. Komput. Inf. Dan Teknol.*, vol. 5, no. 1, pp. 14–14, Jun. 2025, doi: 10.53697/jkomitek.v5i1.2448.
- [77] V. Ravishankar and A. Søgaard, “The Impact of Positional Encodings on Multilingual Compression,” Sep. 11, 2021, *arXiv*: arXiv:2109.05388. doi: 10.48550/arXiv.2109.05388.
- [78] F. Koto, A. Rahimi, J. H. Lau, and T. Baldwin, “IndoLEM and IndoBERT: A Benchmark Dataset and Pre-trained Language Model for Indonesian NLP,” Nov. 02, 2020, *arXiv*: arXiv:2011.00677. doi: 10.48550/arXiv.2011.00677.
- [79] F. Koto, A. Rahimi, J. H. Lau, and T. Baldwin, “IndoLEM and IndoBERT: A Benchmark Dataset and Pre-trained Language Model for Indonesian NLP,” 2020, *arXiv*. doi: 10.48550/ARXIV.2011.00677.
- [80] “How Different Are Language Models and Word Clouds?,” in *Lecture Notes in Computer Science*, Berlin, Heidelberg: Springer Berlin Heidelberg, 2010, pp. 556–568. doi: 10.1007/978-3-642-12275-0\_48.

- [81] N. A. R. Putri, “Identifikasi Topik Dominan pada Hastag Konten Anak di Media Sosial X Menggunakan Word Cloud,” *IJITECH Indones. J. Inf. Technol.*, vol. 3, no. 1, pp. 37–42, Jun. 2025, doi: 10.71155/r80vez10.
- [82] N. M. Muller and K. Markert, “Identifying Mislabeled Instances in Classification Datasets,” in *2019 International Joint Conference on Neural Networks (IJCNN)*, Budapest, Hungary: IEEE, Jul. 2019, pp. 1–8. doi: 10.1109/ijcnn.2019.8851920.
- [83] B. Wilie *et al.*, “IndoNLU: Benchmark and Resources for Evaluating Indonesian Natural Language Understanding,” in *Proceedings of the 1st Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics and the 10th International Joint Conference on Natural Language Processing*, K.-F. Wong, K. Knight, and H. Wu, Eds., Suzhou, China: Association for Computational Linguistics, Dec. 2020, pp. 843–857. doi: 10.18653/v1/2020.aacl-main.85.
- [84] L. Setiyani and E. Tjandra, “ANALISIS KEBUTUHAN FUNGSIONAL APLIKASI PENANGANAN KELUHAN MAHASISWA STUDI KASUS: STMIK ROSMA KARAWANG,” *J. Inov. Pendidik. Dan Teknol. Inf. JIPTI*, vol. 2, no. 1, pp. 8–17, Feb. 2021, doi: 10.52060/pti.v2i01.465.
- [85] J. Eckhardt, D. Mendez Fernandez, and A. Vogelsang, “How to Specify Non-Functional Requirements to Support Seamless Modeling? A Study Design and Preliminary Results,” in *2015 ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM)*, Beijing, China: IEEE, Oct. 2015, pp. 1–4. doi: 10.1109/ESEM.2015.7321200.
- [86] M. Siebenhaller and M. Kaufmann, “Drawing activity diagrams,” in *Proceedings of the 2006 ACM symposium on Software visualization - SoftVis '06*, Brighton, United Kingdom: ACM Press, 2006, p. 159. doi: 10.1145/1148493.1148523.
- [87] H. Sitompul, Z. Matondang, E. Daryanto, and F. Syahputra, “Use Case Diagram Design For Information System Services To Students At The Faculty Of Engineering Universitas Negeri Medan,” in *Proceedings of the 5th International Conference on Innovation in Education, Science, and Culture, ICIESC 2023, 24 October 2023, Medan, Indonesia*, Medan, Indonesia: EAI, 2024. doi: 10.4108/eai.24-10-2023.2342345.
- [88] R. Ghawi and J. Pfeffer, “Efficient Hyperparameter Tuning with Grid Search for Text Categorization using kNN Approach with BM25 Similarity,” *Open Comput. Sci.*, vol. 9, no. 1, pp. 160–180, Jan. 2019, doi: 10.1515/comp-2019-0011.
- [89] F. Pistorius, D. Grimm, F. Erdosi, and E. Sax, “Evaluation Matrix for Smart Machine-Learning Algorithm Choice,” in *2020 1st International Conference on Big Data Analytics and Practices (IBDAP)*, Bangkok, Thailand: IEEE, Sep. 2020, pp. 1–6. doi: 10.1109/IBDAP50342.2020.9245610.

- [90] S. Riyanto, I. S. Sitanggang, T. Djatna, and T. D. Atikah, “Comparative Analysis using Various Performance Metrics in Imbalanced Data for Multi-class Text Classification,” *Int. J. Adv. Comput. Sci. Appl.*, vol. 14, no. 6, 2023, doi: 10.14569/IJACSA.2023.01406116.
- [91] M. Bekkar, H. Djemaa, and T. A. Alitouche, “Evaluation Measures for Models Assessment over Imbalanced Data Sets,” *J. Inf. Eng. Appl.*, 2013, Accessed: Jul. 04, 2025. [Online]. Available: <https://www.semanticscholar.org/paper/Evaluation-Measures-for-Models-Assessment-over-Data-Bekkar-Djemaa/bf6dec62269e5270d1588b1e893e9c2ac2214dea>
- [92] M. Efraim, A. Setiawan, D. Huang, and T. Herlina Rochadiani, “Perancangan Desain Antarmuka Pada Aplikasi Kesehatan Practalk,” *J. Inov. Inform.*, vol. 6, no. 1, pp. 1–10, Mar. 2021, doi: 10.51170/jii.v6i1.147.
- [93] R. van der Goot, M. Müller-Eberstein, and B. Plank, “Frustratingly Easy Performance Improvements for Low-resource Setups: A Tale on BERT and Segment Embeddings,” in *Proceedings of the Thirteenth Language Resources and Evaluation Conference*, N. Calzolari, F. Béchet, P. Blache, K. Choukri, C. Cieri, T. Declerck, S. Goggi, H. Isahara, B. Maegaard, J. Mariani, H. Mazo, J. Odijk, and S. Piperidis, Eds., Marseille, France: European Language Resources Association, Jun. 2022, pp. 1418–1427. Accessed: Jul. 04, 2025. [Online]. Available: <https://aclanthology.org/2022.lrec-1.152/>