

DAFTAR PUSTAKA

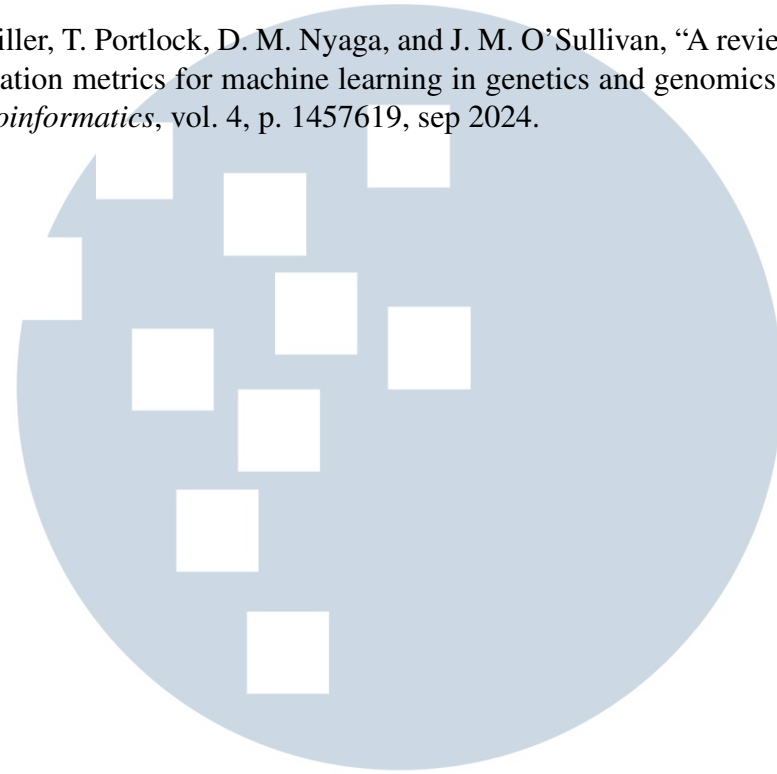
- [1] F. Salsabella, J. Jumadi, and D. W. C. Dewi, "Analisis kesalahan penulisan pada berita online cnbc indonesia untuk mengurangi ambiguitas pemahaman pembaca," *Jurnal Motivasi Pendidikan dan Bahasa*, vol. 1, no. 4, pp. 223–235, dec 2023.
- [2] Azkiyausahira, S. N. Fadillah, and A. Haliq, "Kesalahan berbahasa dalam media massa serta dampaknya terhadap pemahaman publik," *Pendas: Jurnal Ilmiah Pendidikan Dasar*, vol. 10, no. 02, pp. 243–256, jun 2025.
- [3] A. Musyafa, Y. Gao, A. Solyman, C. Wu, and S. Khan, "Automatic correction of indonesian grammatical errors based on transformer," *Applied Sciences*, vol. 12, no. 20, p. 10380, oct 2022.
- [4] S. Mulyatun, H. Utama, and A. Mustopa, "Pendekatan natural language processing pada aplikasi chatbot sebagai alat bantu customer service," *JOISM: JURNAL OF INFORMATION SYSTEM MANAGEMENT*, vol. 2, no. 2, pp. 12–17, 2021.
- [5] D. Soyusiawaty, *Buku Ajar Pemrosesan Bahasa Alami*. Yogyakarta: Laboratorium Teknik Informatika, Universitas Ahmad Dahlan, mar 2023.
- [6] U. sagar, "A broad survey of natural language processing," *SSRG International Journal of Computer Science and Engineering (SSRG-IJCSE)*, vol. 6, no. 12, pp. 15–18, dec 2019.
- [7] D. A. Dahl, "Natural language processing: Past, present and future," in *Advanced Analytics for Green and Sustainable ECONOMIC DEVELOPMENT*, Z. Mahmood, Ed. Springer, 2013, pp. 85–113.
- [8] L. S. Nurwahidah, A. Sela, Ambarwati, A. S. D. Lestari, A. F. Nisa, A. Aulia, and E. Kurniawan, "Workshop on utilizing ai-based natural language processing (nlp) for language error pattern analysis and improving the quality of students' academic writing," *Indonesian Journal of Community Empowerment (IJCE)*, vol. 6, no. 2, pp. 102–106, 2025.
- [9] A. I. Fahma, I. Cholissodin, and R. S. Perdana, "Identifikasi kesalahan penulisan kata (typographical error) pada dokumen berbahasa indonesia menggunakan metode n-gram dan levenshtein distance," *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer*, vol. 2, no. 1, pp. 53–62, jan 2018.
- [10] F. Alfarisy, Maghfirah, E. Devinsky, and R. K. Hastiani, "Analisis kesalahan berbahasa dalam platform berita media sosial," *ANUVA*, vol. 6, no. 4, pp. 417–432, 2022.

- [11] U. Kholifah and A. Sabardila, "Analisis kesalahan gaya berbahasa pada sosial media instagram dalam caption dan komentar," *NUSA*, vol. 15, no. 3, pp. 352–364, aug 2020.
- [12] J. Tetreault and C. Leacock, "Automated grammatical error correction for language learners," in *Proceedings of COLING 2014, the 25th International Conference on Computational Linguistics: Tutorial Abstracts*, Dublin, Ireland, aug 2014, pp. 8–10.
- [13] M. Amien, "Sejarah dan perkembangan teknik natural language processing (nlp) bahasa indonesia: Tinjauan tentang sejarah, perkembangan teknologi, dan aplikasi nlp dalam bahasa indonesia," *arXiv preprint arXiv:2304.02746*, mar 2023.
- [14] K. Gleneagles, M. V. Overbeek, N. Mediyawati, R. Sutomo, and S. B. Nusantara, "U-tapis melting words: an artificial intelligence application for detecting melt word errors in indonesia online news," 2024.
- [15] B. Glennardy, M. V. Overbeek, N. Mediyawati, S. B. Nusantara, and R. Sutomo, "U-tapis sal-tik: Typing error detection using random forest algorithm," *Ultimatics: Jurnal Teknik Informatika*, vol. 16, no. 1, pp. 38–45, jun 2024.
- [16] A. K. B. Saputra and M. V. Overbeek, "Harnessing long short-term memory algorithm for enhanced di-di word error detection and correction," in *IST INTERNATIONAL CONFERENCE TRACK ON ARTIFICIAL INTELLIGENCE HORIZONS & SOCIETY*, 2024.
- [17] N. Mediyawati, J. C. Young, and S. B. Nusantara, "U-TAPIS: AUTOMATIC SPELLING FILTER AS AN EFFORT TO IMPROVE INDONESIAN LANGUAGE COMPETENCIES OF JOURNALISTIC STUDENTS," *Cakrawala Pendidikan*, vol. 40, no. 2, pp. 402–412, jun 2021.
- [18] D. Lailatul M and A. D. Savitri, "Kajian kritis terhadap partikel bahasa indonesia dalam kamus besar bahasa indonesia (kbbi) daring," *Bapala*, vol. 9, no. 3, pp. 1–10, 2022.
- [19] "Penulisan kata: Partikel," <https://ejaan.kemendikdasmen.go.id/eyd/penulisan-kata/partikel/>, diakses pada 8 November 2025.
- [20] H. L. Wati, M. T. I. R. Wiradinata, N. Anggraeni, S. Kolbiah, U. Hendar, and N. Agustina, "Perbandingan algoritma random forest dan xgboost untuk analisis sentimen publik terhadap rumah makan payakumbuah," *NARATIF: Jurnal Ilmiah Nasional Riset Aplikasi dan Teknik Informatika*, vol. 07, no. 01, pp. 64–71, jun 2025.

- [21] I. R. Hendrawan, E. Utami, and A. D. Hartanto, "Comparison of naïve bayes algorithm and xgboost on local product review text classification," *Edumatic: Jurnal Pendidikan Informatika*, vol. 6, no. 1, pp. 143–149, jun 2022.
- [22] A. F. Zain, H. Al Azies, and I. K. Ananda, "Analisis sentimen ulasan pengguna iphone dengan pendekatan hibrida roberta dan xgboost," *Jurnal Algoritma*, vol. 22, no. 1, pp. 1039–1049, jul 2025.
- [23] Yulistiani and Styawati, "Analisis sentimen terhadap calon presiden indonesia 2024 dengan metode extreme gradient boosting (xgboost)," *Jurnal Informatika: Jurnal pengembangan IT*, vol. 9, no. 3, pp. 322–328, 2024.
- [24] H. H. Sinaga and S. Agustian, "Pebandingan metode decision tree dan xgboost untuk klasifikasi sentimen vaksin covid-19 di twitter," *Jurnal Nasional Teknologi dan Sistem Informasi*, vol. 08, no. 03, pp. 107–114, dec 2022.
- [25] M. Gazioğlu and S. Aydın, "Identifying grammatical errors and mistakes via a written learner corpus in a foreign language context," *Journal of Language Research (JLR)*, vol. 8, no. 2, pp. 91–106, 2024.
- [26] N. H. M. Anh, N. H. Yen, N. T. Y. Tho, and L. M. Nhut, "Grammatical errors in academic writing of english second-year students," *European Journal of English Language Teaching*, vol. 7, no. 6, pp. 70–83, 2022.
- [27] H. Chen, "Identification of grammatical errors of english language based on intelligent translational model," *Mobile Information Systems*, vol. 2022, p. 4472190, 2022.
- [28] F. Xiao and S. Yin, "English grammar intelligent error correction technology based on the n-gram language model," *Journal of Intelligent Systems*, vol. 33, no. 1, p. 20230259, 2024.
- [29] C. Bryant, Z. Yuan, M. R. Qorib, H. Cao, H. T. Ng, and T. Briscoe, "Grammatical error correction: A survey of the state of the art," *Computational Linguistics*, vol. 49, no. 3, pp. 643–701, sep 2023.
- [30] Supriyono, A. P. Wibawa, Suyono, and F. Kurniawan, "Advancements in natural language processing: Implications, challenges, and future directions," *Telematics and Informatics Reports*, vol. 16, p. 100173, nov 2024.
- [31] J. Song, "A review of the application of natural language processing in human-computer interaction," in *Proceedings of the 2nd International Conference on Machine Learning and Automation*, 2024.
- [32] International Organization for Standardization, "How does natural language processing work?" <https://www.iso.org/artificial-intelligence/natural-language-processing>, 2023, accessed: 21-Oct-2025.

- [33] P. R. Alapati, A. Swathi, J. N. Madhuri, V. K. Burugari, B. Pagidipati, Y. A. B. El-Ebiary, and P. S, "Improving english writing skills through nlp-driven error detection and correction systems," (*IJACSA International Journal of Advanced Computer Science and Applications*, vol. 16, no. 2, 2025).
- [34] T. Chen and C. Guestrin, "Xgboost: A scalable tree boosting system," in *Proceedings of the 22nd Acm Sigkdd International Conference on Knowledge Discovery and Data Mining*, 2016, pp. 785–794.
- [35] J. M. A. S. Dachi and P. Sitompul, "Analisis perbandingan algoritma xgboost dan algoritma random forest ensemble learning pada klasifikasi keputusan kredit," *Jurnal Riset Rumpun Matematika dan Ilmu Pengetahuan Alam (JURRIMIPA)*, vol. 2, no. 2, pp. 87–103, oct 2023.
- [36] C. Liu, "Enhancing credit card fraud detection on imbalanced datasets," in *Highlights in Business, Economics and Management (GEFHR 2023)*, vol. 21, 2023, pp. 765–773.
- [37] S. Pathak, "Financial crime detection using swift synthetic dataset," Tech. Rep., apr 2023, preprint.
- [38] "Xgboost with python: Machine learning mastery," https://books.google.co.id/books?hl=en&lr=&id=HgmqDwAAQBAJ&oi=fnd&pg=PP1&dq=xgboost+with+python+machine+learning+mastery&ots=nNjDfaP9ME&sig=sjVXhfFbzt4VsKA1zBfPwaJjVLE&redir_esc=y#v=onepage&q=xgboost%20with%20python%20machine%20learning%20mastery&f=false.
- [39] H. Du, L. Lv, H. Wang, and A. Guo, "A novel method for detecting credit card fraud problems," *PLoS ONE*, vol. 19, no. 3, p. e0294537, mar 2024.
- [40] G. T. Berge, O.-C. Granmo, T. O. Tveit, A. L. Ruthjersen, and J. Sharma, "Combining unsupervised, supervised and rule-based learning: the case of detecting patient allergies in electronic health records," *BMC Medical Informatics and Decision Making*, vol. 23, no. 188, 2023.
- [41] N. N. Karanikolas, E. Manga, N. Samaridi, V. Stergiopoulos, E. Tousidou, and M. Vassilakopoulos, "Strengths and weaknesses of llm-based and rule-based nlp technologies and their potential synergies," *Electronics*, vol. 14, no. 15, p. 3064, jul 2025.
- [42] S. M. Marier, X. Chen, L. Zhu, and X. Kong, "Grammatical error correction for low-resource languages: a review of challenges, strategies, computational and future directions," *PeerJ Computer Science*, vol. 11, p. e3044, jul 2025.
- [43] W. Olabiyi, M. Rahab, and F. Blakes, "Hybrid models in natural language processing," jul 2024, researchGate Preprint.

- [44] O. Rainio, J. Teuho, and R. Klén, “Evaluation metrics and statistical tests for machine learning,” *Scientific Reports*, vol. 14, no. 1, p. 6086, 2024.
- [45] C. Miller, T. Portlock, D. M. Nyaga, and J. M. O’Sullivan, “A review of model evaluation metrics for machine learning in genetics and genomics,” *Frontiers in Bioinformatics*, vol. 4, p. 1457619, sep 2024.



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