

DAFTAR PUSTAKA

- [1] H. A. Wibowo, T. A. Prawiro, M. Ihsan, A. F. Aji, R. E. Prasajo, R. Mahendra, and S. Fitriany, "Semi-supervised low-resource style transfer of indonesian informal to formal language with iterative forward-translation," 2020.
- [2] A. Vaswani, N. Shazeer, N. Parmar, J. Uszkoreit, L. Jones, A. N. Gomez, L. Kaiser, and I. Polosukhin, "Attention is all you need," 2017.
- [3] C. E. Shannon, "A mathematical theory of communication," *The Bell system technical journal*, vol. 27, no. 3, pp. 379–423, 1948.
- [4] B. R. O. Anderson, *Language and power: Exploring political cultures in Indonesia*. Cornell University Press, 1990.
- [5] V. Fromkin, R. Rodman, and N. Hyams, *An Introduction to Language*. Cengage Learning, 2013.
- [6] D. Crystal, *The Cambridge encyclopedia of language*, 3rd ed. Cambridge, England: Cambridge University Press, Jun. 2010.
- [7] M. Bucholtz and K. Hall, "Language and identity," *A companion to linguistic anthropology*, vol. 1, pp. 369–394, 2004.
- [8] L. Simasiku, C. Kasanda, and T. Smit, "Can code switching enhance learners' academic achievement?," *English Language Teaching*, vol. 8, no. 2, pp. 70–77, 2015.
- [9] J. Cummins, *Language, power, and pedagogy: Bilingual children in the crossfire*. Multilingual matters, 2000, vol. 23.
- [10] A. M. Borghi, L. Barca, F. Binkofski, and L. Tummolini, "Abstract concepts, language and sociality: from acquisition to inner speech," *Philosophical Transactions of the Royal Society B: Biological Sciences*, vol. 373, no. 1752, p. 20170134, 2018.
- [11] D. Jurafsky and J. H. Martin, "Speech and language processing. 3rd," 2022.
- [12] Ç. T. Mart, "Teaching grammar in context: why and how?" *Theory & Practice in Language Studies*, vol. 3, no. 1, 2013.
- [13] R. S. Frantz, L. E. Starr, and A. L. Bailey, "Syntactic complexity as an aspect of text complexity," *Educational Researcher*, vol. 44, no. 7, pp. 387–393, 2015.
- [14] V. S. Ferreira, "Ambiguity, accessibility, and a division of labor for communicative success," *Psychology of Learning and motivation*, vol. 49, pp. 209–246, 2008.
- [15] A. M. Moeliono, *Bahasa dan struktur sosial*. Jakarta: Universitas Indonesia, Fakultas Sastra, 1983.
- [16] Z. Hu, R. K.-W. Lee, C. C. Aggarwal, and A. Zhang, "Text style transfer: A review and experimental evaluation," *ACM SIGKDD Explorations Newsletter*, vol. 24, no. 1, pp. 14–45, 2022.

- [17] A. M. Moeliono, H. Lapoliwa, H. Alwi, S. S. T. W. Sasangka *et al.*, *Tata bahasa baku bahasa Indonesia*. Jakarta: Badan Pengembangan dan Pembinaan Bahasa, Kementerian Pendidikan dan Kebudayaan, 2017.
- [18] C. J. Fox, "What do we mean when we say" professionalism?": a language usage analysis for public administration," *The American Review of Public Administration*, vol. 22, no. 1, pp. 1–17, 1992.
- [19] J. Hartley, "Legal ease and 'legalese'," *Psychology, Crime & Law*, vol. 6, no. 1, pp. 1–20, 2000.
- [20] A. Menditto, M. Patriarca, and B. Magnusson, "Understanding the meaning of accuracy, trueness and precision," *Accreditation and quality assurance*, vol. 12, pp. 45–47, 2007.
- [21] J. T. Irvine, "Formality and informality in communicative events," *American anthropologist*, vol. 81, no. 4, pp. 773–790, 1979.
- [22] N. J. Smith-Hefner, "Women and politeness: The javanese example," *Language in Society*, vol. 17, no. 4, pp. 535–554, 1988.
- [23] E. Ketelaar and V. Frings-Hessami, "Scholarly and professional communication in archives: archival traditions and languages," pp. 1–7, 2021.
- [24] S. Rao and J. Tetreault, "Dear sir or madam, may i introduce the gyafc dataset: Corpus, benchmarks and metrics for formality style transfer," *arXiv preprint arXiv:1803.06535*, 2018.
- [25] J. A. Bateman and C. L. Paris, "Phrasing a text in terms the user can understand," in *Proceedings of the 11th International Joint Conference on Artificial Intelligence - Volume 2*, ser. IJCAI'89. San Francisco, CA, USA: Morgan Kaufmann Publishers Inc., 1989, p. 1511–1517.
- [26] E. Stamatatos, S. Michos, N. Fakotakis, and G. Kokkinakis, "A user-assisted business letter generator dealing with text's stylistic variations," in *Proceedings Ninth IEEE International Conference on Tools with Artificial Intelligence*, 1997, pp. 182–189.
- [27] R. Power, D. Scott, and N. Bouayad-Agha, "Generating texts with style," in *Proceedings of the 4th International Conference on Computational Linguistics and Intelligent Text Processing*, ser. CICLing'03. Berlin, Heidelberg: Springer-Verlag, 2003, p. 444–452.
- [28] E. Reiter, R. Robertson, and L. M. Osman, "Lessons from a failure: Generating tailored smoking cessation letters," *Artificial Intelligence*, vol. 144, no. 1, pp. 41–58, 2003. [Online]. Available: <https://www.sciencedirect.com/science/article/pii/S0004370202003703>
- [29] S. G. Sripada, E. Reiter, I. Davy, and K. Nilssen, "Lessons from deploying nlg technology for marine weather forecast text generation," in *Proceedings of the 16th European Conference on Artificial Intelligence*, ser. ECAI'04. NLD: IOS Press, 2004, p. 760–764.

- [30] E. Reiter, S. Sripada, J. Hunter, J. Yu, and I. Davy, "Choosing words in computer-generated weather forecasts," *Artificial Intelligence*, vol. 167, no. 1, pp. 137–169, 2005, connecting Language to the World. [Online]. Available: <https://www.sciencedirect.com/science/article/pii/S0004370205000998>
- [31] A. Belz, "Automatic generation of weather forecast texts using comprehensive probabilistic generation-space models," *Natural Language Engineering*, vol. 14, no. 4, pp. 431–455, 2008.
- [32] S. Reddy and K. Knight, "Obfuscating gender in social media writing," in *Proceedings of the First Workshop on NLP and Computational Social Science*. Austin, Texas: Association for Computational Linguistics, Nov. 2016, pp. 17–26. [Online]. Available: <https://aclanthology.org/W16-5603>
- [33] S. Wubben, A. van den Bosch, and E. Krahmer, "Sentence simplification by monolingual machine translation," in *Proceedings of the 50th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*. Jeju Island, Korea: Association for Computational Linguistics, Jul. 2012, pp. 1015–1024. [Online]. Available: <https://aclanthology.org/P12-1107>
- [34] W. Xu, C. Napoles, E. Pavlick, Q. Chen, and C. Callison-Burch, "Optimizing statistical machine translation for text simplification," *Transactions of the Association for Computational Linguistics*, vol. 4, pp. 401–415, 2016. [Online]. Available: <https://aclanthology.org/Q16-1029>
- [35] E. Rabinovich, S. Mirkin, R. N. Patel, L. Specia, and S. Wintner, "Personalized machine translation: Preserving original author traits," 2017.
- [36] X. Niu, M. Martindale, and M. Carpuat, "A study of style in machine translation: Controlling the formality of machine translation output," in *Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing*. Copenhagen, Denmark: Association for Computational Linguistics, Sep. 2017, pp. 2814–2819. [Online]. Available: <https://aclanthology.org/D17-1299>
- [37] Z. Zhang, S. Ren, S. Liu, J. Wang, P. Chen, M. Li, M. Zhou, and E. Chen, "Style transfer as unsupervised machine translation," 2018.
- [38] Z. Jin, D. Jin, J. Mueller, N. Matthews, and E. Santus, "IMaT: Unsupervised text attribute transfer via iterative matching and translation," in *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP)*. Hong Kong, China: Association for Computational Linguistics, Nov. 2019, pp. 3097–3109. [Online]. Available: <https://aclanthology.org/D19-1306>
- [39] A. Sudhakar, B. Upadhyay, and A. Maheswaran, "'transforming' delete, retrieve, generate approach for controlled text style transfer," in *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP)*. Hong Kong, China: Association for Computational Linguistics, Nov. 2019, pp. 3269–3279. [Online]. Available: <https://aclanthology.org/D19-1322>

- [40] E. Malmi, A. Severyn, and S. Rothe, “Unsupervised text style transfer with padded masked language models,” in *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP)*. Online: Association for Computational Linguistics, Nov. 2020, pp. 8671–8680. [Online]. Available: <https://aclanthology.org/2020.emnlp-main.699>
- [41] V. Snæbjarnarson, H. B. Símonarson, P. O. Ragnarsson, S. L. Ingólfssdóttir, H. P. Jónsson, V. Þorsteinsson, and H. Einarsson, “A warm start and a clean crawled corpus – a recipe for good language models,” 2022.
- [42] S. Rothe, J. Mallinson, E. Malmi, S. Krause, and A. Severyn, “A simple recipe for multilingual grammatical error correction,” 2022.
- [43] M. Artetxe, I. Aldabe, R. Agerri, O. P. de Viñaspre, and A. Soroa, “Does corpus quality really matter for low-resource languages?” 2022.
- [44] K. Krishna, S. Garg, J. P. Bigham, and Z. C. Lipton, “Downstream datasets make surprisingly good pretraining corpora,” 2023.
- [45] M. Marion, A. Üstün, L. Pozzobon, A. Wang, M. Fadaee, and S. Hooker, “When less is more: Investigating data pruning for pretraining llms at scale,” 2023.
- [46] P. Koehn and R. Knowles, “Six challenges for neural machine translation,” in *Proceedings of the First Workshop on Neural Machine Translation*. Vancouver: Association for Computational Linguistics, Aug. 2017, pp. 28–39. [Online]. Available: <https://aclanthology.org/W17-3204>
- [47] A. F. Aji, G. I. Winata, F. Koto, S. Cahyawijaya, A. Romadhony, R. Mahendra, K. Kurniawan, D. Moeljadi, R. E. Prasajo, T. Baldwin, J. H. Lau, and S. Ruder, “One country, 700+ languages: Nlp challenges for underrepresented languages and dialects in indonesia,” 2022.
- [48] S. Cahyawijaya, H. Lovenia, A. F. Aji, G. I. Winata, B. Wilie, R. Mahendra, C. Wibisono, A. Romadhony, K. Vincentio, F. Koto, J. Santoso, D. Moeljadi, C. Wirawan, F. Hudi, I. H. Parmonangan, I. Alfina, M. S. Wicaksono, I. F. Putra, S. Rahmadani, Y. Oenang, A. A. Septiandri, J. Jaya, K. D. Dhole, A. A. Suryani, R. A. Putri, D. Su, K. Stevens, M. N. Nityasya, M. F. Adilazuarda, R. Ignatius, R. Diandaru, T. Yu, V. Ghifari, W. Dai, Y. Xu, D. Damapusita, C. Tho, I. M. K. Karo, T. N. Fattyana, Z. Ji, P. Fung, G. Neubig, T. Baldwin, S. Ruder, H. Sujaini, S. Sakti, and A. Purwarianti, “Nusacrowd: Open source initiative for indonesian nlp resources,” 2023.
- [49] B. Wilie, K. Vincentio, G. I. Winata, S. Cahyawijaya, X. Li, Z. Y. Lim, S. Soleman, R. Mahendra, P. Fung, S. Bahar, and A. Purwarianti, “Indonlu: Benchmark and resources for evaluating indonesian natural language understanding,” 2020.
- [50] D.-H. Lee *et al.*, “Pseudo-label: The simple and efficient semi-supervised learning method for deep neural networks,” in *Workshop on challenges in representation learning, ICML*, vol. 3, no. 2. Atlanta, 2013, p. 896.
- [51] S. Edunov, M. Ott, M. Auli, and D. Grangier, “Understanding back-translation at scale,” in *Proceedings of the 2018 Conference on Empirical*

Methods in Natural Language Processing. Brussels, Belgium: Association for Computational Linguistics, Oct.-Nov. 2018, pp. 489–500. [Online]. Available: <https://aclanthology.org/D18-1045>

- [52] S. Kiyono, J. Suzuki, M. Mita, T. Mizumoto, and K. Inui, “An empirical study of incorporating pseudo data into grammatical error correction,” *arXiv preprint arXiv:1909.00502*, 2019.
- [53] J. Náplava and M. Straka, “Grammatical error correction in low-resource scenarios,” in *Proceedings of the 5th Workshop on Noisy User-generated Text (W-NUT 2019)*. Hong Kong, China: Association for Computational Linguistics, Nov. 2019, pp. 346–356. [Online]. Available: <https://aclanthology.org/D19-5545>
- [54] F. Palma Gomez, A. Rozovskaya, and D. Roth, “A low-resource approach to the grammatical error correction of Ukrainian,” in *Proceedings of the Second Ukrainian Natural Language Processing Workshop (UNLP)*. Dubrovnik, Croatia: Association for Computational Linguistics, May 2023, pp. 114–120. [Online]. Available: <https://aclanthology.org/2023.unlp-1.14>
- [55] D. Goldhahn, T. Eckart, and U. Quasthoff, “Building large monolingual dictionaries at the Leipzig corpora collection: From 100 to 200 languages,” in *Proceedings of the Eighth International Conference on Language Resources and Evaluation (LREC’12)*. Istanbul, Turkey: European Language Resources Association (ELRA), May 2012, pp. 759–765. [Online]. Available: http://www.lrec-conf.org/proceedings/lrec2012/pdf/327_Paper.pdf
- [56] N. H. B. M. Noor, S. Sapuan, and F. Bond, “Creating the open Wordnet Bahasa,” in *Proceedings of the 25th Pacific Asia Conference on Language, Information and Computation*, H. H. Gao and M. Dong, Eds. Singapore: Institute of Digital Enhancement of Cognitive Processing, Waseda University, Dec. 2011, pp. 255–264. [Online]. Available: <https://aclanthology.org/Y11-1027>
- [57] K. Papineni, S. Roukos, T. Ward, and W.-J. Zhu, “Bleu: a method for automatic evaluation of machine translation,” in *Proceedings of the 40th Annual Meeting of the Association for Computational Linguistics*. Philadelphia, Pennsylvania, USA: Association for Computational Linguistics, Jul. 2002, pp. 311–318. [Online]. Available: <https://aclanthology.org/P02-1040>
- [58] D. Jin, Z. Jin, Z. Hu, O. Vechtomova, and R. Mihalcea, “Deep learning for text style transfer: A survey,” *Computational Linguistics*, vol. 48, no. 1, pp. 155–205, 2022.
- [59] A. Gatt and E. Krahmer, “Survey of the state of the art in natural language generation: Core tasks, applications and evaluation,” 2018.
- [60] L. Mou and O. Vechtomova, “Stylized text generation: Approaches and applications,” in *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics: Tutorial Abstracts*. Online: Association for Computational Linguistics, Jul. 2020, pp. 19–22. [Online]. Available: <https://aclanthology.org/2020.acl-tutorials.5>

- [61] R. Shetty, B. Schiele, and M. Fritz, “{A4NT}: Author attribute anonymity by adversarial training of neural machine translation,” in *27th USENIX Security Symposium (USENIX Security 18)*, 2018, pp. 1633–1650.
- [62] T. Niu and M. Bansal, “Polite dialogue generation without parallel data,” 2018.
- [63] Y. Cao, R. Shui, L. Pan, M.-Y. Kan, Z. Liu, and T.-S. Chua, “Expertise style transfer: A new task towards better communication between experts and laymen,” 2020.
- [64] E. REITER and R. DALE, “Building applied natural language generation systems,” *Natural Language Engineering*, vol. 3, no. 1, p. 57–87, 1997.
- [65] F. Abu Sheikha and D. Inkpen, “Generation of formal and informal sentences,” in *Proceedings of the 13th European Workshop on Natural Language Generation*. Nancy, France: Association for Computational Linguistics, Sep. 2011, pp. 187–193. [Online]. Available: <https://aclanthology.org/W11-2826>
- [66] W. Xu, A. Ritter, B. Dolan, R. Grishman, and C. Cherry, “Paraphrasing for style,” in *Proceedings of COLING 2012*. Mumbai, India: The COLING 2012 Organizing Committee, Dec. 2012, pp. 2899–2914. [Online]. Available: <https://aclanthology.org/C12-1177>
- [67] S. Wubben, A. van den Bosch, and E. Krahmer, “Sentence simplification by monolingual machine translation,” in *Proceedings of the 50th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*. Jeju Island, Korea: Association for Computational Linguistics, Jul. 2012, pp. 1015–1024. [Online]. Available: <https://aclanthology.org/P12-1107>
- [68] H. Jhamtani, V. Gangal, E. Hovy, and E. Nyberg, “Shakespearizing modern language using copy-enriched sequence-to-sequence models,” *arXiv preprint arXiv:1707.01161*, 2017.
- [69] R. Xu, T. Ge, and F. Wei, “Formality style transfer with hybrid textual annotations,” *arXiv preprint arXiv:1903.06353*, 2019.
- [70] R. Pryzant, R. D. Martinez, N. Dass, S. Kurohashi, D. Jurafsky, and D. Yang, “Automatically neutralizing subjective bias in text,” 2019.
- [71] T. Shen, T. Lei, R. Barzilay, and T. Jaakkola, “Style transfer from non-parallel text by cross-alignment,” *Advances in neural information processing systems*, vol. 30, 2017.
- [72] Z. Hu, Z. Yang, X. Liang, R. Salakhutdinov, and E. P. Xing, “Toward controlled generation of text,” in *International conference on machine learning*. PMLR, 2017, pp. 1587–1596.
- [73] Z. Fu, X. Tan, N. Peng, D. Zhao, and R. Yan, “Style transfer in text: Exploration and evaluation,” in *Proceedings of the AAAI Conference on Artificial Intelligence*, vol. 32, no. 1, 2018.

- [74] J. Zhao, Y. Kim, K. Zhang, A. Rush, and Y. LeCun, "Adversarially regularized autoencoders," in *International conference on machine learning*. PMLR, 2018, pp. 5902–5911.
- [75] S. Prabhumoye, Y. Tsvetkov, R. Salakhutdinov, and A. W. Black, "Style transfer through back-translation," *arXiv preprint arXiv:1804.09000*, 2018.
- [76] Z. Yang, Z. Hu, C. Dyer, E. P. Xing, and T. Berg-Kirkpatrick, "Unsupervised text style transfer using language models as discriminators," *Advances in Neural Information Processing Systems*, vol. 31, 2018.
- [77] J. Mueller, D. Gifford, and T. Jaakkola, "Sequence to better sequence: continuous revision of combinatorial structures," in *International Conference on Machine Learning*. PMLR, 2017, pp. 2536–2544.
- [78] Y. Liao, L. Bing, P. Li, S. Shi, W. Lam, and T. Zhang, "Quase: Sequence editing under quantifiable guidance," in *Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing*, 2018, pp. 3855–3864.
- [79] D. Liu, J. Fu, Y. Zhang, C. Pal, and J. Lv, "Revision in continuous space: Unsupervised text style transfer without adversarial learning," in *Proceedings of the AAAI Conference on Artificial Intelligence*, vol. 34, no. 05, 2020, pp. 8376–8383.
- [80] X. Yi, Z. Liu, W. Li, and M. Sun, "Text style transfer via learning style instance supported latent space," in *Proceedings of the Twenty-Ninth International Conference on International Joint Conferences on Artificial Intelligence*, 2021, pp. 3801–3807.
- [81] J. Li, R. Jia, H. He, and P. Liang, "Delete, retrieve, generate: a simple approach to sentiment and style transfer," in *Proceedings of the 2018 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, Volume 1 (Long Papers)*. New Orleans, Louisiana: Association for Computational Linguistics, Jun. 2018, pp. 1865–1874. [Online]. Available: <https://aclanthology.org/N18-1169>
- [82] A. Madaan, A. Setlur, T. Parekh, B. Poczós, G. Neubig, Y. Yang, R. Salakhutdinov, A. W. Black, and S. Prabhumoye, "Politeness transfer: A tag and generate approach," in *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*. Online: Association for Computational Linguistics, Jul. 2020, pp. 1869–1881. [Online]. Available: <https://aclanthology.org/2020.acl-main.169>
- [83] J. Xu, X. Sun, Q. Zeng, X. Ren, X. Zhang, H. Wang, and W. Li, "Unpaired sentiment-to-sentiment translation: A cycled reinforcement learning approach," *arXiv preprint arXiv:1805.05181*, 2018.
- [84] Y. Zhang, J. Xu, P. Yang, and X. Sun, "Learning sentiment memories for sentiment modification without parallel data," *arXiv preprint arXiv:1808.07311*, 2018.
- [85] X. Wu, T. Zhang, L. Zang, J. Han, and S. Hu, "" mask and infill": Applying masked language model to sentiment transfer," *arXiv preprint arXiv:1908.08039*, 2019.

- [86] N. I. Nikolov and R. H. Hahnloser, “Large-scale hierarchical alignment for data-driven text rewriting,” *arXiv preprint arXiv:1810.08237*, 2018.
- [87] F. Khosmood and R. Levinson, “Automatic synonym and phrase replacement show promise for style transformation,” in *2010 Ninth International Conference on Machine Learning and Applications*. IEEE, 2010, pp. 958–961.
- [88] M. Mansoorizadeh, T. Rahgooy, M. Aminiyan, and M. Eskandari, “Author obfuscation using wordnet and language models—notebook for pan at clef 2016,” in *CLEF 2016 Evaluation Labs and Workshop—Working Notes Papers*, 2016, pp. 5–8.
- [89] G. Karadzhov, T. Mihaylova, Y. Kiprova, G. Georgiev, I. Koychev, and P. Nakov, “The case for being average: A mediocrity approach to style masking and author obfuscation: (best of the labs track at clef-2017),” in *Experimental IR Meets Multilinguality, Multimodality, and Interaction: 8th International Conference of the CLEF Association, CLEF 2017, Dublin, Ireland, September 11–14, 2017, Proceedings 8*. Springer, 2017, pp. 173–185.
- [90] M. Simard, C. Goutte, and P. Isabelle, “Statistical phrase-based post-editing,” in *Human Language Technologies 2007: The Conference of the North American Chapter of the Association for Computational Linguistics; Proceedings of the Main Conference*, 2007, pp. 508–515.
- [91] A.-L. Lagarda, V. Alabau, F. Casacuberta, R. Silva, and E. Diaz-de Liano, “Statistical post-editing of a rule-based machine translation system,” in *Proceedings of Human Language Technologies: The 2009 Annual Conference of the North American Chapter of the Association for Computational Linguistics, Companion Volume: Short Papers*, 2009, pp. 217–220.
- [92] M. Koponen, “Is machine translation post-editing worth the effort? a survey of research into post-editing and effort,” *The Journal of Specialised Translation*, vol. 25, no. 2, 2016.
- [93] M. Freitag and Y. Al-Onaizan, “Beam search strategies for neural machine translation,” *arXiv preprint arXiv:1702.01806*, 2017.
- [94] P. Koehn, *Statistical machine translation*. Cambridge University Press, 2009.
- [95] P. Koehn, F. J. Och, and D. Marcu, “Statistical phrase-based translation,” in *Proceedings of the 2003 Human Language Technology Conference of the North American Chapter of the Association for Computational Linguistics*, 2003, pp. 127–133. [Online]. Available: <https://aclanthology.org/N03-1017>
- [96] P. F. Brown, S. A. Della Pietra, V. J. Della Pietra, and R. L. Mercer, “The mathematics of statistical machine translation: Parameter estimation,” *Computational Linguistics*, vol. 19, no. 2, pp. 263–311, 1993. [Online]. Available: <https://aclanthology.org/J93-2003>
- [97] K. Yamada and K. Knight, “A syntax-based statistical translation model,” in *Proceedings of the 39th Annual Meeting of the Association for Computational Linguistics*. Toulouse, France: Association for Computational Linguistics, Jul. 2001, pp. 523–530. [Online]. Available: <https://aclanthology.org/P01-1067>

- [98] M. Dowling, T. Lynn, A. Poncelas, and A. Way, "SMT versus NMT: Preliminary comparisons for Irish," in *Proceedings of the AMTA 2018 Workshop on Technologies for MT of Low Resource Languages (LoResMT 2018)*. Boston, MA: Association for Machine Translation in the Americas, Mar. 2018, pp. 12–20. [Online]. Available: <https://aclanthology.org/W18-2202>
- [99] S. K. Mahata, S. Mandal, D. Das, and S. Bandyopadhyay, "Smt vs nmt: a comparison over hindi & bengali simple sentences," *arXiv preprint arXiv:1812.04898*, 2018.
- [100] F. Stahlberg, E. Hasler, A. Waite, and B. Byrne, "Syntactically guided neural machine translation," *arXiv preprint arXiv:1605.04569*, 2016.
- [101] H. Khayrallah and P. Koehn, "On the impact of various types of noise on neural machine translation," *arXiv preprint arXiv:1805.12282*, 2018.
- [102] L. Bentivogli, A. Bisazza, M. Cettolo, and M. Federico, "Neural versus phrase-based machine translation quality: a case study," *arXiv preprint arXiv:1608.04631*, 2016.
- [103] A. Toral and V. M. Sánchez-Cartagena, "A multifaceted evaluation of neural versus phrase-based machine translation for 9 language directions," *arXiv preprint arXiv:1701.02901*, 2017.
- [104] 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," 2023.
- [105] L. Bentivogli, A. Bisazza, M. Cettolo, and M. Federico, "Neural versus phrase-based mt quality: An in-depth analysis on english–german and english–french," *Computer Speech & Language*, vol. 49, pp. 52–70, 2018.
- [106] E. Hasler, B. Haddow, and P. Koehn, "Sparse lexicalised features and topic adaptation for smt," in *Proceedings of the 9th International Workshop on Spoken Language Translation: Papers*, 2012, pp. 268–275.
- [107] W. Y. Zou, R. Socher, D. Cer, and C. D. Manning, "Bilingual word embeddings for phrase-based machine translation," in *Proceedings of the 2013 conference on empirical methods in natural language processing*, 2013, pp. 1393–1398.
- [108] F. J. Och, D. Gildea, S. Khudanpur, A. Sarkar, K. Yamada, A. Fraser, S. Kumar, L. Shen, D. Smith, K. Eng, V. Jain, Z. Jin, and D. Radev, "A smorgasbord of features for statistical machine translation," in *Proceedings of the Human Language Technology Conference of the North American Chapter of the Association for Computational Linguistics: HLT-NAACL 2004*. Boston, Massachusetts, USA: Association for Computational Linguistics, May 2 - May 7 2004, pp. 161–168. [Online]. Available: <https://aclanthology.org/N04-1021>
- [109] D. Vilar, J. Xu, D. Luis Fernando, and H. Ney, "Error analysis of statistical machine translation output." in *LREC*, 2006, pp. 697–702.
- [110] M. Felice, "Artificial error generation for translation-based grammatical error correction," University of Cambridge, Computer Laboratory, Tech. Rep., 2016.

- [111] S. Nießen and H. Ney, “Statistical machine translation with scarce resources using morpho-syntactic information,” *Computational linguistics*, vol. 30, no. 2, pp. 181–204, 2004.
- [112] S. Khadivi and H. Ney, “Automatic filtering of bilingual corpora for statistical machine translation,” in *International Conference on Application of Natural Language to Information Systems*. Springer, 2005, pp. 263–274.
- [113] P. Koehn and J. Schroeder, “Experiments in domain adaptation for statistical machine translation,” in *Proceedings of the Second Workshop on Statistical Machine Translation*, C. Callison-Burch, P. Koehn, C. S. Fordyce, and C. Monz, Eds. Prague, Czech Republic: Association for Computational Linguistics, Jun. 2007, pp. 224–227. [Online]. Available: <https://aclanthology.org/W07-0733>
- [114] İ. Durgar El-Kahlout and K. Oflazer, “Initial explorations in English to Turkish statistical machine translation,” in *Proceedings on the Workshop on Statistical Machine Translation*, P. Koehn and C. Monz, Eds. New York City: Association for Computational Linguistics, Jun. 2006, pp. 7–14. [Online]. Available: <https://aclanthology.org/W06-3102>
- [115] A. Ramanathan, J. Hegde, R. Shah, P. Bhattacharyya, and M. Sasikumar, “Simple syntactic and morphological processing can help english-hindi statistical machine translation,” in *Proceedings of the Third International Joint Conference on Natural Language Processing: Volume-I*, 2008.
- [116] G. Foster and R. Kuhn, “Mixture-model adaptation for smt,” in *Proceedings of the Second Workshop on Statistical Machine Translation*, 2007, pp. 128–135.
- [117] N. Habash, “Four techniques for online handling of out-of-vocabulary words in arabic-english statistical machine translation,” in *Proceedings of ACL-08: HLT, Short Papers*, 2008, pp. 57–60.
- [118] I. Sutskever, O. Vinyals, and Q. V. Le, “Sequence to sequence learning with neural networks,” *Advances in neural information processing systems*, vol. 27, 2014.
- [119] K. Cho, B. Van Merriënboer, C. Gulcehre, D. Bahdanau, F. Bougares, H. Schwenk, and Y. Bengio, “Learning phrase representations using rnn encoder-decoder for statistical machine translation,” *arXiv preprint arXiv:1406.1078*, 2014.
- [120] D. Bahdanau, K. Cho, and Y. Bengio, “Neural machine translation by jointly learning to align and translate,” *arXiv preprint arXiv:1409.0473*, 2014.
- [121] J. K. Chorowski, D. Bahdanau, D. Serdyuk, K. Cho, and Y. Bengio, “Attention-based models for speech recognition,” *Advances in neural information processing systems*, vol. 28, 2015.
- [122] K. Cho, B. Van Merriënboer, D. Bahdanau, and Y. Bengio, “On the properties of neural machine translation: Encoder-decoder approaches,” *arXiv preprint arXiv:1409.1259*, 2014.
- [123] J. Chung, C. Gulcehre, K. Cho, and Y. Bengio, “Empirical evaluation of gated recurrent neural networks on sequence modeling,” *arXiv preprint arXiv:1412.3555*, 2014.

- [124] J. Zhou, Y. Cao, X. Wang, P. Li, and W. Xu, “Deep recurrent models with fast-forward connections for neural machine translation,” *Transactions of the Association for Computational Linguistics*, vol. 4, pp. 371–383, 2016.
- [125] J. Gehring, M. Auli, D. Grangier, and Y. N. Dauphin, “A convolutional encoder model for neural machine translation,” *arXiv preprint arXiv:1611.02344*, 2016.
- [126] O. Vinyals, M. Fortunato, and N. Jaitly, “Pointer networks,” *Advances in neural information processing systems*, vol. 28, 2015.
- [127] S. Castilho, J. Moorkens, F. Gaspari, R. Sennrich, V. Sisoni, P. Georgakopoulou, P. Lohar, A. Way, A. V. Miceli-Barone, and M. Gialama, “A comparative quality evaluation of pbsmt and nmt using professional translators,” in *Proceedings of Machine Translation Summit XVI: Research Track*, 2017, pp. 116–131.
- [128] M. Junczys-Dowmunt, T. Dwojak, and H. Hoang, “Is neural machine translation ready for deployment? a case study on 30 translation directions,” *arXiv preprint arXiv:1610.01108*, 2016.
- [129] P. Isabelle, C. Cherry, and G. Foster, “A challenge set approach to evaluating machine translation,” *arXiv preprint arXiv:1704.07431*, 2017.
- [130] S. Castilho, J. Moorkens, F. Gaspari, I. Calixto, J. Tinsley, and A. Way, “Is neural machine translation the new state of the art?” *The Prague Bulletin of Mathematical Linguistics*, no. 108, 2017.
- [131] Z. Tu, Z. Lu, Y. Liu, X. Liu, and H. Li, “Modeling coverage for neural machine translation,” *arXiv preprint arXiv:1601.04811*, 2016.
- [132] X. Kong, Z. Tu, S. Shi, E. Hovy, and T. Zhang, “Neural machine translation with adequacy-oriented learning,” in *Proceedings of the AAAI Conference on Artificial Intelligence*, vol. 33, no. 01, 2019, pp. 6618–6625.
- [133] K. Gimpel, D. Batra, C. Dyer, and G. Shakhnarovich, “A systematic exploration of diversity in machine translation,” in *Proceedings of the 2013 Conference on Empirical Methods in Natural Language Processing*, 2013, pp. 1100–1111.
- [134] J. Li, M. Galley, C. Brockett, J. Gao, and B. Dolan, “A diversity-promoting objective function for neural conversation models,” *arXiv preprint arXiv:1510.03055*, 2015.
- [135] C. Schnober, S. Eger, E.-L. D. Dinh, and I. Gurevych, “Still not there? comparing traditional sequence-to-sequence models to encoder-decoder neural networks on monotone string translation tasks,” *arXiv preprint arXiv:1610.07796*, 2016.
- [136] Y. Belinkov and J. Glass, “Analysis methods in neural language processing: A survey,” *Transactions of the Association for Computational Linguistics*, vol. 7, pp. 49–72, 2019.
- [137] E. Strubell, A. Ganesh, and A. McCallum, “Energy and policy considerations for deep learning in nlp,” *arXiv preprint arXiv:1906.02243*, 2019.

- [138] Y. Jia, M. Carl, and X. Wang, "Post-editing neural machine translation versus phrase-based machine translation for english–chinese," *Machine Translation*, vol. 33, no. 1-2, pp. 9–29, 2019.
- [139] K. Wang, H. Hua, and X. Wan, "Controllable unsupervised text attribute transfer via editing entangled latent representation," *Advances in Neural Information Processing Systems*, vol. 32, 2019.
- [140] N. Dai, J. Liang, X. Qiu, and X. Huang, "Style transformer: Unpaired text style transfer without disentangled latent representation," *arXiv preprint arXiv:1905.05621*, 2019.
- [141] V. John, L. Mou, H. Bahuleyan, and O. Vechtomova, "Disentangled representation learning for non-parallel text style transfer," *arXiv preprint arXiv:1808.04339*, 2018.
- [142] A. Romanov, A. Rumshisky, A. Rogers, and D. Donahue, "Adversarial decomposition of text representation," *arXiv preprint arXiv:1808.09042*, 2018.
- [143] L. Logeswaran, H. Lee, and S. Bengio, "Content preserving text generation with attribute controls," *Advances in Neural Information Processing Systems*, vol. 31, 2018.
- [144] C. N. d. Santos, I. Melnyk, and I. Padhi, "Fighting offensive language on social media with unsupervised text style transfer," *arXiv preprint arXiv:1805.07685*, 2018.
- [145] F. Luo, P. Li, J. Zhou, P. Yang, B. Chang, Z. Sui, and X. Sun, "A dual reinforcement learning framework for unsupervised text style transfer," *arXiv preprint arXiv:1905.10060*, 2019.
- [146] Y. Bao, H. Zhou, S. Huang, L. Li, L. Mou, O. Vechtomova, X. Dai, and J. Chen, "Generating sentences from disentangled syntactic and semantic spaces," *arXiv preprint arXiv:1907.05789*, 2019.
- [147] M. Tran, Y. Zhang, and M. Soleymani, "Towards a friendly online community: An unsupervised style transfer framework for profanity redaction," *arXiv preprint arXiv:2011.00403*, 2020.
- [148] C. D. V. Hoang, P. Koehn, G. Haffari, and T. Cohn, "Iterative back-translation for neural machine translation," in *2nd Workshop on Neural Machine Translation and Generation*. Association for Computational Linguistics, 2018, pp. 18–24.
- [149] A. Christiant and A. R. Pratama, "Implementasi deep learning untuk mengubah kalimat tidak sopan menjadi sopan," 2022. [Online]. Available: <https://journal.uui.ac.id/AUTOMATA/article/view/21969>
- [150] B. R. Irnawan and R. Adi, "Improving indonesian informal to formal style transfer via pre-training unlabelled augmented data," in *2023 6th International Conference of Computer and Informatics Engineering (IC2IE)*. IEEE, 2023, pp. 25–29.

- [151] M. Lewis, Y. Liu, N. Goyal, M. Ghazvininejad, A. Mohamed, O. Levy, V. Stoyanov, and L. Zettlemoyer, “BART: Denoising sequence-to-sequence pre-training for natural language generation, translation, and comprehension,” in *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*, D. Jurafsky, J. Chai, N. Schluter, and J. Tetreault, Eds. Online: Association for Computational Linguistics, Jul. 2020, pp. 7871–7880. [Online]. Available: <https://aclanthology.org/2020.acl-main.703>
- [152] A. Radford, J. Wu, R. Child, D. Luan, D. Amodei, I. Sutskever *et al.*, “Language models are unsupervised multitask learners,” *OpenAI blog*, vol. 1, no. 8, p. 9, 2019.
- [153] J. Devlin, M.-W. Chang, K. Lee, and K. Toutanova, “Bert: Pre-training of deep bidirectional transformers for language understanding,” *arXiv preprint arXiv:1810.04805*, 2018.
- [154] A. S. Ariesandy, M. Amien, A. F. Aji, and R. E. Prasajo, “Synthetic source language augmentation for colloquial neural machine translation,” 2020.
- [155] H. A. Wibowo, M. N. Nityasya, A. F. Akyürek, S. Fitriany, A. F. Aji, R. E. Prasajo, and D. T. Wijaya, “IndoCollex: A testbed for morphological transformation of Indonesian colloquial words,” in *Findings of the Association for Computational Linguistics: ACL-IJCNLP 2021*. Online: Association for Computational Linguistics, Aug. 2021, pp. 3170–3183. [Online]. Available: <https://aclanthology.org/2021.findings-acl.280>
- [156] A. N. Pratama, E. Winarko, and Y. Sari, “Author obfuscation untuk bahasa indonesia menggunakan word replacement word embedding,” 2022. [Online]. Available: <https://etd.repository.ugm.ac.id/penelitian/detail/209077>
- [157] Y. Sari and F. P. Al Faridzi, “Unsupervised text style transfer for authorship obfuscation in bahasa indonesia,” *IJCCS (Indonesian Journal of Computing and Cybernetics Systems)*, vol. 17, no. 1, p. 23, 2023.
- [158] N. Imani, A. K. Sari, and Y. Sari, “Clickbait text style transfer based on encoder decoder model for indonesian news headlines using delete, retrieve, generate approach,” 2023. [Online]. Available: <https://etd.repository.ugm.ac.id/penelitian/detail/221613>
- [159] J. Hirschberg and C. D. Manning, “Advances in natural language processing,” *Science*, vol. 349, no. 6245, pp. 261–266, 2015.
- [160] W. S. El-Kassas, C. R. Salama, A. A. Rafea, and H. K. Mohamed, “Automatic text summarization: A comprehensive survey,” *Expert systems with applications*, vol. 165, p. 113679, 2021.
- [161] E. Adamopoulou and L. Moussiades, “An overview of chatbot technology,” in *IFIP international conference on artificial intelligence applications and innovations*. Springer, 2020, pp. 373–383.
- [162] N. Chomsky, *Syntactic Structures*, ser. A Mouton classic. Mouton de Gruyter, 2002. [Online]. Available: https://books.google.co.id/books?id=a6a_b-CXYAkC

- [163] A. Spencer, *Morphological Theory: An Introduction to Word Structure in Generative Grammar*, ser. Blackwell Textbooks in Linguistics. Wiley, 1991. [Online]. Available: <https://books.google.co.id/books?id=eigodiUKzVoC>
- [164] L. Bauer, *Introducing Linguistic Morphology*, ser. G - Reference, Information and Interdisciplinary Subjects Series. Georgetown University Press, 2003. [Online]. Available: <https://books.google.co.id/books?id=I7efQgAACAAJ>
- [165] K. Kukich, "Techniques for automatically correcting words in text," *ACM Comput. Surv.*, vol. 24, no. 4, p. 377–439, dec 1992. [Online]. Available: <https://doi.org/10.1145/146370.146380>
- [166] A. Cruse, *Meaning in Language: An Introduction to Semantics and Pragmatics*. Oxford: Oxford University Press UK, 2004.
- [167] D. Crystal and C. Alan, *A dictionary of linguistics and phonetics*. John Wiley & Sons, 2023.
- [168] S. C. Levinson, *Pragmatics*. Cambridge university press, 1983.
- [169] Z. Yuan and T. Briscoe, "Grammatical error correction using neural machine translation," in *Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies*, 2016, pp. 380–386.
- [170] S. C. Kwasny and N. K. Sondheimer, "Relaxation techniques for parsing grammatically ill-formed input in natural language understanding systems," *American Journal of Computational Linguistics*, vol. 7, no. 2, pp. 99–108, 1981.
- [171] K. Jensen, G. E. Heidorn, L. A. Miller, and Y. Ravin, "Parse fitting and prose fixing: getting a hold on ill-formedness," *American Journal of Computational Linguistics*, vol. 9, no. 3-4, pp. 147–160, 1983.
- [172] J. Burstein, M. Chodorow, and C. Leacock, "Criteria online essay evaluation: An application for automated evaluation of student essays." in *IAAI*, 2003, pp. 3–10.
- [173] C. Leacock, M. Gamon, and C. Brockett, "User input and interactions on microsoft research esl assistant," in *Proceedings of the Fourth Workshop on Innovative Use of NLP for Building Educational Applications*, 2009, pp. 73–81.
- [174] Ø. E. Andersen, H. Yannakoudakis, F. Barker, and T. Parish, "Developing and testing a self-assessment and tutoring system," in *Proceedings of the eighth workshop on innovative use of NLP for building educational applications*, 2013, pp. 32–41.
- [175] G. Sidorov, A. Gupta, M. Tozer, D. Catala, A. Catena, and S. Fuentes, "Rule-based system for automatic grammar correction using syntactic n-grams for English language learning (L2)," in *Proceedings of the Seventeenth Conference on Computational Natural Language Learning: Shared Task*. Sofia, Bulgaria: Association for Computational Linguistics, Aug. 2013, pp. 96–101. [Online]. Available: <https://aclanthology.org/W13-3613>

- [176] R. De Felice and S. Pulman, "A classifier-based approach to preposition and determiner error correction in 12 english," in *Proceedings of the 22nd international conference on computational linguistics (Coling 2008)*, 2008, pp. 169–176.
- [177] A. Rozovskaya and D. Roth, "Training paradigms for correcting errors in grammar and usage," in *Human language technologies: The 2010 annual conference of the north american chapter of the association for computational linguistics*, 2010, pp. 154–162.
- [178] J. Tetreault, J. Foster, and M. Chodorow, "Using parse features for preposition selection and error detection," in *Proceedings of the acl 2010 conference short papers*, 2010, pp. 353–358.
- [179] D. Dahlmeier and H. T. Ng, "Grammatical error correction with alternating structure optimization," in *Proceedings of the 49th annual meeting of the association for computational linguistics: Human language technologies*, 2011, pp. 915–923.
- [180] A. Rozovskaya and D. Roth, "Algorithm selection and model adaptation for esl correction tasks," in *Proceedings of the 49th annual meeting of the association for computational linguistics: Human language technologies*, 2011, pp. 924–933.
- [181] C. Brockett, B. Dolan, and M. Gamon, "Correcting esl errors using phrasal smt techniques," in *21st International Conference on Computational Linguistics and 44th Annual Meeting of the ACL, Sydney, Australia*, 2006.
- [182] Z. Yuan and M. Felice, "Constrained grammatical error correction using statistical machine translation," in *Proceedings of the Seventeenth Conference on Computational Natural Language Learning: Shared Task*, 2013, pp. 52–61.
- [183] N. Ehsan and H. Faili, "Grammatical and context-sensitive error correction using a statistical machine translation framework," *Software: Practice and Experience*, vol. 43, no. 2, pp. 187–206, 2013.
- [184] M. Felice, Z. Yuan, Ø. E. Andersen, H. Yannakoudakis, and E. Kochmar, "Grammatical error correction using hybrid systems and type filtering," in *Proceedings of the Eighteenth Conference on Computational Natural Language Learning: Shared Task*, 2014, pp. 15–24.
- [185] M. Junczys-Dowmunt and R. Grundkiewicz, "The amu system in the conll-2014 shared task: Grammatical error correction by data-intensive and feature-rich statistical machine translation," in *Proceedings of the Eighteenth Conference on Computational Natural Language Learning: Shared Task*, 2014, pp. 25–33.
- [186] J. Ji, Q. Wang, K. Toutanova, Y. Gong, S. Truong, and J. Gao, "A nested attention neural hybrid model for grammatical error correction," *arXiv preprint arXiv:1707.02026*, 2017.
- [187] S. Chollampatt and H. T. Ng, "A multilayer convolutional encoder-decoder neural network for grammatical error correction," in *Proceedings of the AAAI Conference on Artificial Intelligence*, vol. 32, no. 1, 2018.

- [188] M. Junczys-Dowmunt, R. Grundkiewicz, S. Guha, and K. Heafield, “Approaching neural grammatical error correction as a low-resource machine translation task,” *arXiv preprint arXiv:1804.05940*, 2018.
- [189] J. Lichtarge, C. Alberti, S. Kumar, N. Shazeer, N. Parmar, and S. Tong, “Corpora generation for grammatical error correction,” *arXiv preprint arXiv:1904.05780*, 2019.
- [190] B. Irmawati, H. Shindo, and Y. Matsumoto, “Exploiting syntactic similarities for preposition error corrections on indonesian sentences written by second language learner,” *Procedia Computer Science*, vol. 81, pp. 214–220, 2016.
- [191] —, “Generating artificial error data for indonesian preposition error corrections,” *International Journal of Technology*, vol. 8, no. 3, pp. 549–558, 2017.
- [192] B. Irmawati, A. Aranta, W. Wedhaswara, M. I. D. Putra, and S. O. Khairunnisa, “Language resources and tools development for indonesian languages,” *Language Technologies for All (LT4All)*, pp. 231–234, 2019.
- [193] A. Fahda and A. Purwarianti, “A statistical and rule-based spelling and grammar checker for indonesian text,” in *2017 International Conference on Data and Software Engineering (ICoDSE)*. IEEE, 2017, pp. 1–6.
- [194] F. Rahutomo, A. S. Mulyo, and P. Y. Saputra, “Automatic grammar checking system for indonesian,” in *2018 International Conference on Applied Science and Technology (iCAST)*. IEEE, 2018, pp. 308–313.
- [195] D. Keylas, D. S. Rusdianto, and E. Santoso, “Pembangunan kakas bantu untuk memberikan rekomendasi perbaikan kalimat kebutuhan yang ambigu menggunakan teknik berbasis aturan dan statistik,” *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer e-ISSN*, vol. 2548, p. 964X, 2019.
- [196] N. Lin, B. Chen, X. Lin, K. Wattanachote, and S. Jiang, “A framework for indonesian grammar error correction,” *Transactions on Asian and Low-Resource Language Information Processing*, vol. 20, no. 4, pp. 1–12, 2021.
- [197] 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, 2022.
- [198] E. N. Malyuga, “Professional language in formal and business style,” *Global Journal of Human Social Science*, vol. 12, no. 3, pp. 7–10, 2012.
- [199] R. Wardhaugh and J. Fuller, *An Introduction to Sociolinguistics*, ser. Blackwell Textbooks in Linguistics. Wiley, 2014. [Online]. Available: <https://books.google.co.id/books?id=GXETBwAAQBAJ>
- [200] C. D. Manning, “Part-of-speech tagging from 97% to 100%: is it time for some linguistics?” in *International conference on intelligent text processing and computational linguistics*. Springer, 2011, pp. 171–189.
- [201] J. Kupiec, “Robust part-of-speech tagging using a hidden markov model,” *Computer speech & language*, vol. 6, no. 3, pp. 225–242, 1992.

- [202] H. Schmid, “Part-of-speech tagging with neural networks,” *arXiv preprint cmp-lg/9410018*, 1994.
- [203] K. W. Church, “A stochastic parts program and noun phrase parser for unrestricted text,” in *International Conference on Acoustics, Speech, and Signal Processing*. IEEE, 1989, pp. 695–698.
- [204] B. Liu, *Sentiment analysis and opinion mining*. Springer Nature, 2022.
- [205] K. Toutanova, D. Klein, C. D. Manning, and Y. Singer, “Feature-rich part-of-speech tagging with a cyclic dependency network,” in *Proceedings of the 2003 human language technology conference of the north american chapter of the association for computational linguistics*, 2003, pp. 252–259.
- [206] J. Plisson, N. Lavrac, D. Mladenic *et al.*, “A rule based approach to word lemmatization,” in *Proceedings of IS*, vol. 3, 2004, pp. 83–86.
- [207] R. Collobert, J. Weston, L. Bottou, M. Karlen, K. Kavukcuoglu, and P. Kuksa, “Natural language processing (almost) from scratch,” *Journal of machine learning research*, vol. 12, no. ARTICLE, pp. 2493–2537, 2011.
- [208] M. Van Nguyen, V. D. Lai, A. P. B. Veyseh, and T. H. Nguyen, “Trankit: A light-weight transformer-based toolkit for multilingual natural language processing,” *arXiv preprint arXiv:2101.03289*, 2021.
- [209] C. Manning and H. Schütze, *Foundations of statistical natural language processing*. MIT press, 1999.
- [210] J. L. Peterson, “Computer programs for spelling correction: an experiment in program design,” *Computer Programs for Spelling Correction: An Experiment in Program Design*, pp. 1–129, 2005.
- [211] V. I. Levenshtein *et al.*, “Binary codes capable of correcting deletions, insertions, and reversals,” in *Soviet physics doklady*, vol. 10, no. 8. Soviet Union, 1966, pp. 707–710.
- [212] S. Deorowicz and M. Ciura, “Correcting spelling errors by modelling their causes,” *International Journal of Applied Mathematics and Computer Science*, vol. 15, no. 2, pp. 275–285, 2005. [Online]. Available: <http://eudml.org/doc/207742>
- [213] S. Zhang, H. Huang, J. Liu, and H. Li, “Spelling error correction with soft-masked BERT,” in *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*, D. Jurafsky, J. Chai, N. Schluter, and J. Tetreault, Eds. Online: Association for Computational Linguistics, Jul. 2020, pp. 882–890. [Online]. Available: <https://aclanthology.org/2020.acl-main.82>
- [214] D. Hládek, J. Staš, and M. Pleva, “Survey of automatic spelling correction,” *Electronics*, vol. 9, no. 10, p. 1670, 2020.
- [215] G. A. Miller, “Wordnet: a lexical database for english,” *Communications of the ACM*, vol. 38, no. 11, pp. 39–41, 1995.
- [216] C. Fellbaum, *WordNet: An electronic lexical database*. MIT press, 1998.

- [217] T. Mikolov, K. Chen, G. Corrado, and J. Dean, “Efficient estimation of word representations in vector space,” *arXiv preprint arXiv:1301.3781*, 2013.
- [218] I. Goodfellow, Y. Bengio, and A. Courville, *Deep learning*. MIT press, 2016.
- [219] C. M. Bishop and N. M. Nasrabadi, *Pattern recognition and machine learning*. Springer, 2006, vol. 4, no. 4.
- [220] G. E. Hinton and R. R. Salakhutdinov, “Reducing the dimensionality of data with neural networks,” *science*, vol. 313, no. 5786, pp. 504–507, 2006.
- [221] X. Zhu and A. B. Goldberg, *Introduction to semi-supervised learning*. Springer Nature, 2022.
- [222] R. S. Sutton and A. G. Barto, *Reinforcement learning: An introduction*. MIT press, 2018.
- [223] T. Young, D. Hazarika, S. Poria, and E. Cambria, “Recent trends in deep learning based natural language processing,” *ieee Computational intelligence magazine*, vol. 13, no. 3, pp. 55–75, 2018.
- [224] R. Kneser and H. Ney, “Improved backing-off for m-gram language modeling,” in *1995 international conference on acoustics, speech, and signal processing*, vol. 1. IEEE, 1995, pp. 181–184.
- [225] Y. Bengio, R. Ducharme, and P. Vincent, “A neural probabilistic language model,” *Advances in neural information processing systems*, vol. 13, 2000.
- [226] T. Mikolov, M. Karafiát, L. Burget, J. Cernocký, and S. Khudanpur, “Recurrent neural network based language model,” in *Interspeech*, vol. 2, no. 3. Makuhari, 2010, pp. 1045–1048.
- [227] D. Yu and L. Deng, *Automatic speech recognition*. Springer, 2016, vol. 1.
- [228] J. Hutchins, “Machine translation: A concise history,” *Computer aided translation: Theory and practice*, vol. 13, no. 29-70, p. 11, 2007.
- [229] W. J. Hutchins, “Machine translation: A brief history,” in *Concise history of the language sciences*. Elsevier, 1995, pp. 431–445.
- [230] M. R. Costa-Jussa and J. A. Fonollosa, “Latest trends in hybrid machine translation and its applications,” *Computer Speech & Language*, vol. 32, no. 1, pp. 3–10, 2015.
- [231] R. Aharoni, M. Johnson, and O. Firat, “Massively multilingual neural machine translation,” *arXiv preprint arXiv:1903.00089*, 2019.
- [232] J. Tiedemann, “Emerging language spaces learned from massively multilingual corpora,” *arXiv preprint arXiv:1802.00273*, 2018.
- [233] C.-Y. Lin, “Rouge: A package for automatic evaluation of summaries,” in *Text summarization branches out*, 2004, pp. 74–81.

- [234] S. Banerjee and A. Lavie, "Meteor: An automatic metric for mt evaluation with improved correlation with human judgments," in *Proceedings of the acl workshop on intrinsic and extrinsic evaluation measures for machine translation and/or summarization*, 2005, pp. 65–72.
- [235] M. Popović, "chrF: character n-gram f-score for automatic mt evaluation," in *Proceedings of the tenth workshop on statistical machine translation*, 2015, pp. 392–395.
- [236] M. Kusner, Y. Sun, N. Kolkin, and K. Weinberger, "From word embeddings to document distances," in *International conference on machine learning*. PMLR, 2015, pp. 957–966.
- [237] T. Zhang, V. Kishore, F. Wu, K. Q. Weinberger, and Y. Artzi, "Bertscore: Evaluating text generation with bert," *arXiv preprint arXiv:1904.09675*, 2019.
- [238] T. Pimentel, M. Ryskina, S. J. Mielke, S. Wu, E. Chodroff, B. Leonard, G. Nicolai, Y. Ghanggo Ate, S. Khalifa, N. Habash, C. El-Khaissi, O. Goldman, M. Gasser, W. Lane, M. Coler, A. Oncevay, J. R. Montoya Samame, G. C. Silva Villegas, A. Ek, J.-P. Bernardy, A. Shcherbakov, A. Bayyr-ool, K. Sheifer, S. Ganieva, M. Plugaryov, E. Klyachko, A. Salehi, A. Krizhanovsky, N. Krizhanovsky, C. Vania, S. Ivanova, A. Salchak, C. Straughn, Z. Liu, J. N. Washington, D. Ataman, W. Kieraś, M. Woliński, T. Suhardijanto, N. Stoehr, Z. Nuriah, S. Ratan, F. M. Tyers, E. M. Ponti, G. Aiton, R. J. Hatcher, E. Prud'hommeaux, R. Kumar, M. Hulden, B. Barta, D. Lakatos, G. Szolnok, J. Ács, M. Raj, D. Yarowsky, R. Cotterell, B. Ambridge, and E. Vylomova, "Sigmorphon 2021 shared task on morphological reinflection: Generalization across languages," in *Proceedings of the 18th SIGMORPHON Workshop on Computational Research in Phonetics, Phonology, and Morphology*. Online: Association for Computational Linguistics, Aug. 2021, pp. 229–259. [Online]. Available: <https://aclanthology.org/2021.sigmorphon-1.25>
- [239] N. Aliyah Salsabila, Y. Ardhito Winatmoko, A. Akbar Septiandri, and A. Jamal, "Colloquial Indonesian lexicon," in *2018 International Conference on Asian Language Processing (IALP)*, 2018, pp. 226–229.
- [240] G. Attardi, "Wikiextractor," <https://github.com/attardi/wikiextractor>, 2015.
- [241] P. Qi, Y. Zhang, Y. Zhang, J. Bolton, and C. D. Manning, "Stanza: A Python natural language processing toolkit for many human languages," in *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics: System Demonstrations*, 2020.
- [242] A. Joulin, E. Grave, P. Bojanowski, and T. Mikolov, "Bag of tricks for efficient text classification," in *Proceedings of the 15th Conference of the European Chapter of the Association for Computational Linguistics: Volume 2, Short Papers*. Association for Computational Linguistics, April 2017, pp. 427–431.
- [243] S. Bird and E. Loper, "NLTK: The natural language toolkit," in *Proceedings of the ACL Interactive Poster and Demonstration Sessions*. Barcelona, Spain: Association for Computational Linguistics, Jul. 2004, pp. 214–217. [Online]. Available: <https://aclanthology.org/P04-3031>

- [244] S. D. Larasati, V. Kuboň, and D. Zeman, “Indonesian morphology tool (morphind): Towards an Indonesian corpus,” in *Systems and Frameworks for Computational Morphology: Second International Workshop, SFCM 2011, Zurich, Switzerland, August 26, 2011. Proceedings 2*. Springer, 2011, pp. 119–129.
- [245] R. McDonald, J. Nivre, Y. Quirnbach-Brundage, Y. Goldberg, D. Das, K. Ganchev, K. Hall, S. Petrov, H. Zhang, O. Täckström, C. Bedini, N. Bertomeu Castelló, and J. Lee, “Universal Dependency annotation for multilingual parsing,” in *Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics (Volume 2: Short Papers)*, H. Schuetze, P. Fung, and M. Poesio, Eds. Sofia, Bulgaria: Association for Computational Linguistics, Aug. 2013, pp. 92–97. [Online]. Available: <https://aclanthology.org/P13-2017>
- [246] R. Sennrich, B. Haddow, and A. Birch, “Neural machine translation of rare words with subword units,” 2016.
- [247] T. Kudo, “Subword regularization: Improving neural network translation models with multiple subword candidates,” 2018.
- [248] M. Ott, S. Edunov, A. Baevski, A. Fan, S. Gross, N. Ng, D. Grangier, and M. Auli, “fairseq: A fast, extensible toolkit for sequence modeling,” in *Proceedings of NAACL-HLT 2019: Demonstrations*, 2019.
- [249] D. P. Kingma and J. Ba, “Adam: A method for stochastic optimization,” 2017.
- [250] M. Post, “A call for clarity in reporting BLEU scores,” in *Proceedings of the Third Conference on Machine Translation: Research Papers*, O. Bojar, R. Chatterjee, C. Federmann, M. Fishel, Y. Graham, B. Haddow, M. Huck, A. J. Yepes, P. Koehn, C. Monz, M. Negri, A. Névél, M. Neves, M. Post, L. Specia, M. Turchi, and K. Verspoor, Eds. Brussels, Belgium: Association for Computational Linguistics, Oct. 2018, pp. 186–191. [Online]. Available: <https://aclanthology.org/W18-6319>