

DAFTAR PUSTAKA

- Akiba, T., Sano, S., Yanase, T., Ohta, T., & Koyama, M. (2019). *Optuna: A Next-generation Hyperparameter Optimization Framework*. <http://arxiv.org/abs/1907.10902>
- Alsentzer, E., Murphy, J. R., Boag, W., Weng, W.-H., Jin, D., Naumann, T., & McDermott, M. B. A. (2019). *Publicly Available Clinical BERT Embeddings*. <http://arxiv.org/abs/1904.03323>
- Anugerah Simanjuntak, Rosni Lumbantoruan, Kartika Sianipar, Rut Gultom, Mario Simaremare, Samuel Situmeang, & Erwin Panggabean. (2024). Research and Analysis of IndoBERT Hyperparameter Tuning in Fake News Detection. *Jurnal Nasional Teknik Elektro Dan Teknologi Informasi*, 13(1), 60–67. <https://doi.org/10.22146/jnteti.v13i1.8532>
- Bates, D. W., & Samal, L. (2018). Interoperability: What Is It, How Can We Make It Work for Clinicians, and How Should We Measure It in the Future? In *Health Services Research* (Vol. 53, Issue 5, pp. 3270–3277). Blackwell Publishing Inc. <https://doi.org/10.1111/1475-6773.12852>
- Beltagy, I., Lo, K., & Cohan, A. (2019). *SciBERT: A Pretrained Language Model for Scientific Text*. <http://arxiv.org/abs/1903.10676>
- Devlin, J., Chang, M.-W., Lee, K., Google, K. T., & Language, A. I. (n.d.). *BERT: Pre-training of Deep Bidirectional Transformers for Language Understanding*. <https://github.com/tensorflow/tensor2tensor>
- ElJundi, O., Antoun, W., El Droubi, N., Hajj, H., El-Hajj, W., & Shaban, K. (2019). hULMonA: The Universal Language Model in Arabic. *Proceedings of the Fourth Arabic Natural Language Processing Workshop*, 68–77. <https://doi.org/10.18653/v1/W19-4608>
- Gu, Y., Tinn, R., Cheng, H., Lucas, M., Usuyama, N., Liu, X., Naumann, T., Gao, J., & Poon, H. (2022). Domain-Specific Language Model Pretraining for Biomedical Natural Language Processing. *ACM Transactions on Computing for Healthcare*, 3(1). <https://doi.org/10.1145/3458754>

- Harnoune, A., Rhanoui, M., Mikram, M., Yousfi, S., Elkaimbillah, Z., & Asri, B. El. (2023). *BERT Based Clinical Knowledge Extraction for Biomedical Knowledge Graph Construction and Analysis*. <https://doi.org/10.1016/j.cmpbup.2021.100042>
- Hutama, L. B., & Suhartono, D. (2022). Indonesian Hoax News Classification with Multilingual Transformer Model and BERTopic. *Informatica (Slovenia)*, 46(8), 81–90. <https://doi.org/10.31449/inf.v46i8.4336>
- Jensen, K., Soguero-Ruiz, C., Oyvind Mikalsen, K., Lindsetmo, R. O., Kouskoumvekaki, I., Girolami, M., Olav Skrovseth, S., & Magne Augestad, K. (2017). Analysis of free text in electronic health records for identification of cancer patient trajectories. *Scientific Reports*, 7. <https://doi.org/10.1038/srep46226>
- Keraghel, I., Morbieu, S., & Nadif, M. (2024). *Recent Advances in Named Entity Recognition: A Comprehensive Survey and Comparative Study*. <http://arxiv.org/abs/2401.10825>
- Kim, Y. M., & Lee, T. H. (2020). Korean clinical entity recognition from diagnosis text using BERT. *BMC Medical Informatics and Decision Making*, 20. <https://doi.org/10.1186/s12911-020-01241-8>
- Kong, H. J. (2019). Managing unstructured big data in healthcare system. In *Healthcare Informatics Research* (Vol. 25, Issue 1, pp. 1–2). Korean Society of Medical Informatics. <https://doi.org/10.4258/hir.2019.25.1.1>
- Kunaefi, A., Abidin, Z., & Kusumawati, R. (2025). KLASIFIKASI BERITA HOAKS BAHASA INDONESIA MENGGUNAKAN INDOBERT FINE-TUNING DENGAN PENDEKA-TAN FOCAL LOSS PADA DATA TIDAK SEIMBANG. *JUPI (Jurnal Ilmiah Penelitian Dan Pembelajaran Informatika)*, 10(2), 1706–1714. <https://doi.org/10.29100/jipi.v10i2.7811>
- Kury, F., Butler, A., Yuan, C., Fu, L. heng, Sun, Y., Liu, H., Sim, I., Carini, S., & Weng, C. (2020). Chia, a large annotated corpus of clinical trial eligibility criteria. *Scientific Data*, 7(1). <https://doi.org/10.1038/s41597-020-00620-0>
- Lee, J., Yoon, W., Kim, S., Kim, D., Kim, S., So, C. H., & Kang, J. (2020). BioBERT: A pre-trained biomedical language representation model for

- biomedical text mining. *Bioinformatics*, 36(4), 1234–1240.
<https://doi.org/10.1093/bioinformatics/btz682>
- Lehne, M., Sass, J., Essenwanger, A., Schepers, J., & Thun, S. (2019). Why digital medicine depends on interoperability. In *npj Digital Medicine* (Vol. 2, Issue 1). Nature Publishing Group. <https://doi.org/10.1038/s41746-019-0158-1>
- Li, J., Wei, Q., Ghiasvand, O., Chen, M., Lobanov, V., Weng, C., & Xu, H. (2022). A comparative study of pre-trained language models for named entity recognition in clinical trial eligibility criteria from multiple corpora. *BMC Medical Informatics and Decision Making*, 22.
<https://doi.org/10.1186/s12911-022-01967-7>
- Li, X., Zhang, H., & Zhou, X. H. (2020). Chinese clinical named entity recognition with variant neural structures based on BERT methods. *Journal of Biomedical Informatics*, 107. <https://doi.org/10.1016/j.jbi.2020.103422>
- Luthfi, E. T., Izzah, Z., Yusoh, M., & Aboobaider, B. M. (n.d.). BERT based Named Entity Recognition for Automated Hadith Narrator Identification. In *IJACSA) International Journal of Advanced Computer Science and Applications* (Vol. 13, Issue 1). www.ijacsa.thesai.org
- Margam, R. (2023). Importance of Interoperability in Healthcare. In *International Journal of Innovative Science and Research Technology* (Vol. 8, Issue 7). www.ijisrt.com555
- Nemoto, S., Kitada, S., & Iyatomi, H. (2025). *Majority or Minority: Data Imbalance Learning Method for Named Entity Recognition*.
<https://doi.org/10.1109/ACCESS.2024.3522972>
- Pakhale, K. (2023). *Comprehensive Overview of Named Entity Recognition: Models, Domain-Specific Applications and Challenges*.
<http://arxiv.org/abs/2309.14084>
- Peng, Y., Yan, S., & Lu, Z. (2019). *Transfer Learning in Biomedical Natural Language Processing: An Evaluation of BERT and ELMo on Ten Benchmarking Datasets*. <http://arxiv.org/abs/1906.05474>
- Percha, B. (2021). *Modern Clinical Text Mining: A Guide and Review*.
<https://doi.org/10.1146/annurev-biodatasci-030421>

- Reyes-Aguillón, J., Del Moral, R., Ramos-Flores, O., Gómez-Adorno, H., & Bel-Enguix, G. (2022). *Clinical Named Entity Recognition and Linking using BERT in Combination with Spanish Medical Embeddings*. <http://ceur-ws.org>
- Sedlakova, J., Daniore, P., Wintsch, A. H., Wolf, M., Stanikic, M., Haag, C., Sieber, C., Schneider, G., Staub, K., Ettlin, D. A., Grübner, O., Rinaldi, F., & von Wyl, V. (2023). Challenges and best practices for digital unstructured data enrichment in health research: A systematic narrative review. *PLOS Digital Health*, 2(10). <https://doi.org/10.1371/journal.pdig.0000347>
- Su, P., & Vijay-Shanker, K. (2022). Investigation of improving the pre-training and fine-tuning of BERT model for biomedical relation extraction. *BMC Bioinformatics*, 23(1). <https://doi.org/10.1186/s12859-022-04642-w>
- Sun, C., & Yang, Z. (n.d.). *Transfer Learning in Biomedical Named Entity Recognition: An Evaluation of BERT in the PharmaCoNER task*.
- Šuvalov, H., Laur, S., & Kolde, R. (2023). Information Extraction from Medical Texts with BERT Using Human-in-the-Loop Labeling. *Studies in Health Technology and Informatics*, 302, 831–832. <https://doi.org/10.3233/SHTI230281>
- Vasantharajan, C., Zin Tun, K., Thi-Nga, H., Jain, S., Rong, T., & Siong, C. E. (n.d.). *MedBERT: A pre-trained language model for biomedical Named Entity Recognition*. <https://bit.ly/medbert>
- Vaswani, A., Shazeer, N., Parmar, N., Uszkoreit, J., Jones, L., Gomez, A. N., Kaiser, L., & Polosukhin, I. (2023). *Attention Is All You Need*. <http://arxiv.org/abs/1706.03762>
- Vunikili, R., George Marica, V., & Farri, O. (2020). *Clinical NER using Spanish BERT Embeddings*. <http://ceur-ws.org>
- Wang, T., Zhang, Y., Zhang, Y., Lu, H., Yu, B., Peng, S., Ma, Y., & Li, D. (2023). A Hybrid Model Based on Deep Convolutional Network for Medical Named Entity Recognition. *Journal of Electrical and Computer Engineering*, 2023. <https://doi.org/10.1155/2023/8969144>
- Watanabe, S. (2023). *Tree-Structured Parzen Estimator: Understanding Its Algorithm Components and Their Roles for Better Empirical Performance*.

<http://arxiv.org/abs/2304.11127>