

## DAFTAR PUSTAKA

- [1] A. A. Allam, A. A. Almetwally and M. Bin-Jumah, "Ambient air pollution and its influence on human health and welfare: an overview," *Environmental science and pollution research international* , vol. 27, no. 24815-24830., 2020.
- [2] A. Kurniawan, "PENGUKURAN PARAMETER KUALITAS UDARA(CO, NO2, SO2, O3 DAN PM10) DI BUKIT KOTOTABANG BERBASISISPU," *Jurnal Techno Sains*, vol. 7, 2017.
- [3] S. H. H. Al-Taai and . W. A. Mohammed al-Dulaimi, "Air Pollution: A Study of Its Concept, Causes, Sources and Effects," *Asian Journal of Water, Environment, and Pollution*, vol. 19, no. 1, pp. 17-22, 2022.
- [4] W. TEAM, "World Health Organization," WHO global air quality guidelines, 22 September 2021. [Online]. Available: <https://www.who.int/publications/i/item/9789240034433>. [Accessed 22 Februari 2024].
- [5] Z. J. Andersen, "Air pollution epidemiology," *ResearchGate*, pp. 163-182, 2020.
- [6] A. A. Almetwally, . M. Bin-Jumah and . A. A. Allam, "Ambient air pollution and its influence on human health and welfare: an overview," *Environmental Science and Pollution Research*, vol. 27, no. 20, p. 24, 2020.
- [7] Y. Bian, Z. Huang, J. Ou, Z. Zhong, Y. Xu, Z. Zhang, X. Xiao, X. Ye, Y. Wu, X. Yin, C. Li, L. Chen, M. Shao and J. Zheng, "Evolution of anthropogenic air pollutant emissions in Guangdong Province, China, from 2006 to 2015," *European Geosciences Union*, vol. 19, no. 18, 2019.
- [8] F. Mahmood, M. F. Khokhar and Z. Mahmood, "Examining the relationship of tropospheric ozone and climate change on crop productivity using the multivariate panel data techniques," *Journal of Environmental Management*, vol. 272, 2020.
- [9] U. N. Teams, "United Nations," Department of Economic and Social Affairs UN DESA, 16 May 2018. [Online]. Available: <https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html>. [Accessed 22 Februari 24].
- [10] E. E. McDuffie, S. J. Smith, P. O'R, K. Tibrewal, C. Venkataraman, E. A. Marais, B. Zheng, M. Crippa, M. Brauer and R. V. Martin, "A global anthropogenic

emission inventory of atmospheric pollutants from sector- and fuel-specific sources (1970–2017): an application of the Community Emissions Data System (CEDS)," *Earth System Science Data*, vol. 12, no. 4, 2020.

- [11] iku.menlhk.go.id, "INDEKS STANDAR PENCEMAR UDARA (ISPU) SEBAGAI INFORMASI MUTU UDARA AMBIEN DI INDONESIA," Kementerian Lingkungan Hidup dan Kehutanan (KLHK), 24 09 2020. [Online]. Available: <https://ditppu.menlhk.go.id/portal/read/indeks-standar-pencemar-udara-ispu-sebagai-informasi-mutu-udara-ambien-di-indonesia>. [Accessed 22 02 2024].
- [12] World Population Review Team, "World Population Review," United Nations University , 01 01 2024. [Online]. Available: <https://worldpopulationreview.com/world-cities/jakarta-population>. [Accessed 22 02 2024].
- [13] About the Asian Development Bank, "Air Quality in Asia," in *WHY IS IT IMPORTANT, AND WHAT CAN WE DO?*, Manila, Philippines, Creative Commons Attribut, 2022, p. 7.
- [14] H.-Y. Kwak, J. Ko, S. Lee and C.-H. Joh, "Identifying the correlation between rainfall, traffic flow performance and air pollution concentration in Seoul using a path analysis," *Elsevier*, vol. 25, pp. 3552-3563, 2017.
- [15] M. A. Faishol, E. and A. N. Irfansyah, "Predict Urban Air Pollution in Surabaya Using Recurrent Neural Network – Long Short Term Memory," *Jurnal Ilmiah Teknologi Informasi*, vol. 18, no. 2, pp. 102-114, 2020.
- [16] T. Handhayani, "An integrated analysis of air pollution and meteorological conditions in Jakarta," *Scientific Reports*, no. 13, p. 5798, 2023.
- [17] Y. Liu, P. Wang, Y. Li, L. Wen and X. Deng, "Air quality prediction models based on meteorological factors and real-time data of industrial waste gas," *National Library of Medicine*, vol. 12, p. 9253, 2022.
- [18] H. Novianto, M. M. Azis and H. Mu, "Analisis perubahan sistem kualitas udara Kota Yogyakarta pada masa," *Jurnal Rekayasa Proses*, vol. 16, no. 2, 2022.
- [19] Z. Wang and X. Gu, "A Time Series Prediction Algorithm Based on BiLSTM and Prophet Hybrid Model," *4th International Conference on Computer Engineering and Application (ICCEA)*, pp. 128-132, 2023.
- [20] R. Mitchell and F. Swee, Air Pollution, United Kingdom: ED - Tech Press, 2018.

- [21] Center for Science Education , "Air Quality and Climate Change," Center for Science Education , 2024. [Online]. Available: <https://scied.ucar.edu/learning-zone/air-quality/air-quality-and-climate-change>. [Accessed 22 02 2024].
- [22] S. Sharma and F. Marechal, "Carbon Dioxide Capture From Internal Combustion Engine Exhaust Using Temperature Swing Adsorption," *Frontiers in Energy Research*, vol. 7, no. 143, 2019.
- [23] official website of the United States Government, " Health and Environmental Effects of Particulate Matter (PM)," official website of the United States Government, 23 08 2023. [Online]. Available: <https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm>. [Accessed 22 02 2024].
- [24] An official website of the United States Goverment, "Visibility and Regional Haze," An official website of the United States Goverment, 12 02 2024. [Online]. Available: <https://www.epa.gov/visibility>. [Accessed 22 02 2024].
- [25] An official website of the United States goverment, "Effects of Acid Rain," An official website of the United States goverment, 01 06 2023. [Online]. Available: <https://www.epa.gov/acidrain/effects-acid-rain>. [Accessed 22 02 2024].
- [26] An official website of the United States goverment, "Health and Environmental Effects of Particulate Matter (PM)," An official website of the United States goverment, 23 08 2023. [Online]. Available: <https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm>. [Accessed 22 02 2024].
- [27] Center for Science Education , "Air Pollution: How We're Changing the Air," Center for Science Education , 2024. [Online]. Available: <https://scied.ucar.edu/learning-zone/air-quality/air-pollution>. [Accessed 22 02 2024].
- [28] aqicn.org, "Air Quality Forecasting - How accurate can it be?," aqicn.org, 23 03 2015. [Online]. Available: <https://aqicn.org/faq/2015-03-23/air-quality-forecasting-how-accurate-can-it-be/>. [Accessed 2024 02 2024].
- [29] I. S. Writers, "Can air pollution be predicted?," IQAir , 11 01 2022. [Online]. Available: <https://www.iqair.com/newsroom/can-air-pollution-be-predicted>. [Accessed 22 02 2024].

- [30] A. A. Rizqi and D. Kusumaningsih, "Klasifikasi Curah Hujan di Kota Bogor Provinsi Jawa Barat dengan Menggunakan Metode Naïve Bayes," *Prosiding Seminar Nasional Mahasiswa Fakultas Teknologi Informasi (SENAFTI)*, vol. 1, no. 1, 2022.
- [31] Balai Besar Meterologi Klimatologi dan Geofisika (BMKG), "Daftar istilah Klimatologi," Balai Besar Meterologi Klimatologi dan Geofisika (BMKG), 2023. [Online]. Available: <https://bbmkg3.bmkg.go.id/daftar-istilah-musim>. [Accessed 22 02 2024].
- [32] Badan Meteorologi, Klimatologi, dan Geofisika Team, "Probabilitik Curah Hujan 20 mm (tiap 24 jam)," Badan Meteorologi, Klimatologi, dan Geofisika, 2024. [Online]. Available: [https://www.bmkg.go.id/cuaca/probabilitik-curah-hujan.bmkg#:~:text=0.5%20%E2%80%93%2020%20mm%2Fhari%20,\(merah\)%20%3A%20Hujan%20sangat%20lebat](https://www.bmkg.go.id/cuaca/probabilitik-curah-hujan.bmkg#:~:text=0.5%20%E2%80%93%2020%20mm%2Fhari%20,(merah)%20%3A%20Hujan%20sangat%20lebat). [Accessed 22 02 2024].
- [33] anadeleon, "How air pollution affect water rainfall patterns," MEP Water Group, 15 09 2022. [Online]. Available: <https://mepwatergroup.eu/how-air-pollution-affect-water-rainfall-patterns/#:~:text=From%20rainfall%20patterns%20to%20monsoon,and%20moves%20into%20the%20atmosphere..> [Accessed 22 02 2024].
- [34] E. Zvornicanin, "Differences Between Bidirectional and Unidirectional LSTM," Baeldung, 08 06 2023. [Online]. Available: <https://www.baeldung.com/cs/bidirectional-vs-unidirectional-lstm#conclusion>. [Accessed 22 02 2024].
- [35] A. Ozlu, "Long Short Term Memory (LSTM) Networks in a nutshell," Medium, 13 06 2020. [Online]. Available: <https://ahmetozlu.medium.com/long-short-term-memory-lstm-networks-in-a-nutshell-363cd470ccac>. [Accessed 22 02 2024].
- [36] Colah, "Understanding LSTM Networks," 27 08 2017. [Online]. Available: [http://colah.github.io/posts/2015-08-Understanding-LSTMs/?source=post\\_page-----37e2f46f1714-----#fn1](http://colah.github.io/posts/2015-08-Understanding-LSTMs/?source=post_page-----37e2f46f1714-----#fn1). [Accessed 22 02 2024].
- [37] K. Xu, J. L. Ba, R. Kiros, K. Cho, A. Courville and e. al, "Show, Attend and Tell: Neural Image Caption," no. 12, p. 1503, 2015.

- [38] F. Lemic, J. Struye and J. Famaey, "Short-Term Trajectory Prediction for Full-Immersive Multiuser Virtual Reality with Redirected Walking," *IEEE Global Communications Conference (GLOBECOM)*, 2022.
- [39] A. Ozlu, "Long Short Term Memory (LSTM) Networks in a nutshell," Medium, 13 06 2020. [Online]. Available: [https://ahmetozlu-medium-com.translate.goog/long-short-term-memory-lstm-networks-in-a-nutshell-363cd470ccac?\\_x\\_tr\\_sl=en&\\_x\\_tr\\_tl=id&\\_x\\_tr\\_hl=id&\\_x\\_tr\\_pto=tc&\\_x\\_tr\\_hist=true](https://ahmetozlu-medium-com.translate.goog/long-short-term-memory-lstm-networks-in-a-nutshell-363cd470ccac?_x_tr_sl=en&_x_tr_tl=id&_x_tr_hl=id&_x_tr_pto=tc&_x_tr_hist=true). [Accessed 22 02 2024].
- [40] A. Ozlu, "Singkatnya, Jaringan Memori Jangka Pendek Panjang (LSTM).," Medium, 13 06 2020. [Online]. Available: [https://ahmetozlu-medium-com.translate.goog/long-short-term-memory-lstm-networks-in-a-nutshell-363cd470ccac?\\_x\\_tr\\_sl=en&\\_x\\_tr\\_tl=id&\\_x\\_tr\\_hl=id&\\_x\\_tr\\_pto=tc&\\_x\\_tr\\_hist=true](https://ahmetozlu-medium-com.translate.goog/long-short-term-memory-lstm-networks-in-a-nutshell-363cd470ccac?_x_tr_sl=en&_x_tr_tl=id&_x_tr_hl=id&_x_tr_pto=tc&_x_tr_hist=true). [Accessed 2024 02 22].
- [41] E. Zvornicanin, "Differences Between Bidirectional and Unidirectional LSTM," Baeldung, 08 06 2023. [Online]. Available: <https://www.baeldung.com/cs/bidirectional-vs-unidirectional-lstm#conclusion>. [Accessed 2024 02 22].
- [42] G. Kazbekova, Z. Ismagulova, Z. Kemelbekova, S. Tileubay, B. Baimurzayev and A. Bazarbayeva, "Offensive Language Detection on Online Social Networks using Hybrid Deep Learning Architecture," (*IJACSA*) International Journal of Advanced Computer Science and Applications, vol. 14, no. 11, 2023.
- [43] A. M. Ertugrul and P. KARAGOZ, "Movie Genre Classification from Plot Summaries Using Bidirectional LSTM," *IEEE International Conference on Semantic Computing*, 2018.
- [44] A. R. Isnain, A. Sihabuddin and Y. Suyanto, "Bidirectional Long Short Term Memory Method and Word2vec Extraction Approach for Hate Speech Detection," *JCCS (Indonesian Journal of Computing and Cybernetics Systems)*, vol. 14, no. 12, pp. 169-178, 2020.
- [45] S. Siami-Namini, N. Tavakoli and A. S. Namin, "The Performance of LSTM and BiLSTM in Forecasting Time Series," *IEEE International Conference on Big Data (Big Data)*, pp. 3285-3292, 2019.

- [46] Y. Wang, D. Bao and S. J. Qin, "A novel bidirectional DiPLS based LSTM algorithm and its application in industrial process time series prediction," *Elsevier*, vol. 240, p. 104878, 2023.
- [47] W. Jintanachaiwat, K. Jongsathitphai, . N. Pimsan, M. Sojiphan, A. Tayakee, T. Junthe and T. Siriborvornratanakul, "Using LSTM to translate Thai sign language to text in real time," *Discover Artificial Intelligence*, vol. 4, no. 17, 2023.
- [48] M. G. Rizky, J. Jusak and . I. Puspasar, "Analisis Perbandingan Metode Lstm Dan Bilstm Untuk Klasifikasi Sinyal Jantung," *JCONES - Journal of Control and Network Systems* , vol. 10, no. 2, pp. 44-49, 2021.
- [49] H. Kang, S. Yang, H. Jianying and J. Oh, "Time Series Prediction of Wastewater Flow Rate by Bidirectional LSTM Deep Learning," *International Journal of Control Automation and Systems*, vol. 18, no. 12, pp. 3023-3030, 2020.
- [50] Facebook Open Source, "PROPHET," Facebook Open Source, 2023. [Online]. Available: <https://facebook.github.io/prophet/>. [Accessed 22 02 2024].
- [51] K. Srinivasa, M. Shilpa, M. R. Mundada and S. Sheldole, Deep Learning Applications for Cyber-physical Systems, United States: IGI Global, 2021.
- [52] T. Bashir, C. Haoyong, M. F. Tahir and Z. Liqiang, "Short term electricity load forecasting using hybrid prophet-LSTM model optimized by BPNN," *Energy Reports*, vol. 8, pp. 1678-1686, 2022.
- [53] M. Janowicz-lomott, K. Lyskawa, P. Polychronidou and A. Karasavvoglou, "Forecasting Meal Requirements Using Time Series Methods in Organization," in *Economic and Financial Challenges for Balkan and Eastern European Countries*, Warsaw, Poland, Springer Proceedings in Business and Economics, 2018, p. 250.
- [54] A. Bekkar, B. Hssina, S. Douzi and K. Douzi, "Air-pollution prediction in smart city, deep learning approach," *Journal of Big Data*, vol. 8, no. 161, 2021.
- [55] F. Hamami and I. A. Dahlan, "Univariate Time Series Data Forecasting of Air Pollution using LSTM Neural Network," 2020 , pp. 1-5, 2020.
- [56] S. M. ALHIRMZIY and B. A. Qader, "Multivariate Time Series Forecasting with LSTM for Madrid, Spain pollution," *International Conference on Computing and Information Science and Technology and Their Applications (ICCISTA)*, pp. 1-5, 2019.

- [57] P. Jiang, I. Bychkov, J. Liu and A. Hmelnov, "Predicting of air pollutant concentrations based on spatio-temporal attention convolutional LSTM networks," *Proceedings of the 1st International Workshop on Advanced Information and Computation Technologies and Systems*, vol. 2858, pp. 83-90, 2020.
- [58] S. V. Belavadi, S. Rajagopal, R. R and R. Mohan, "Air Quality Forecasting using LSTM RNN and Wireless Sensor Networks," *Procedia Computer Science*, vol. 170, pp. 241-248, 2020.
- [59] N. Fernandes and J. Gonçalves, "Multivariate and multi-output indoor air quality prediction using bidirectional LSTM," *11th International Symposium on Digital Forensics and Security (ISDFS)*, pp. 1-6, 2023.
- [60] R. Dua, D. Madaan, P. Mukherjee and B. Lall, "Real Time Attention Based Bidirectional Long Short-Term Memory Networks for Air Pollution Forecasting," *IEEE Fifth International Conference on Big Data Computing Service and Applications (BigDataService)*, pp. 151-158, 2019.
- [61] S. Jeya and L. Sankari, "Air Pollution Prediction by Deep Learning Model," *4th International Conference on Intelligent Computing and Control Systems (ICICCS)*, pp. 736-741, 2020.
- [62] Y. Wang, D. Bao and S. J. Qin, "A novel bidirectional DiPLS based LSTM algorithm and its application in industrial process time series prediction," *Chemometrics and Intelligent Laboratory Systems*, vol. 240, 2023.
- [63] Y. Sun, L. Zhang and M. Yao, "Chaotic Time Series Prediction of Multi-Dimensional Nonlinear System Based on Bidirectional LSTM Model," *Chaos, Solitons & Fractals*, vol. 175, no. 1, 2023.
- [64] S. Su, Y. Sun, Y. Zeng and C. Peng, "Aviation risk prediction based on Prophet-LSTM hybrid algorithm," *Aircraft Engineering and Aerospace Technology*, vol. 95, no. 7, 2023.