DAFTAR PUSTAKA

[1]   World Health Organization, "Noncommunicable diseases," *World Health Organization,* 2024. [Online]. Tersedia: https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases. [Diakses: Jan. 5, 2025].

[2]   World Health Organization, "Noncommunicable Diseases Data Portal," *World Health Organization*, 2025. [Online]. Tersedia: https://ncdportal.org/. [Diakses: Jan. 5, 2025].

[3]   Penyakit Tidak Menular Indonesia. "Strategi Komprehensif Penanganan Kanker di Indonesia: Rencana Kanker Nasional 2024-2034," *Penyakit Tidak Menular Indonesia*, 2024. [Online]. Tersedia: https://p2ptm.kemkes.go.id/informasi-p2ptm/strategi-komprehensif-penanganan-kanker-di-indonesia-rencana-kanker-nasional-2024-2034. [Diakses: Jan. 5, 2024].

[4]   D. Piovani, G. K. Nikolopoulos, and S. Bonovas, "Non-Communicable Diseases: the Invisible Epidemic," *Journal of Clinical Medicine*, vol. 11, no. 19, p. 5939, Oct. 2022.

[5]   E. Asmin, R. Tahitu, B. J. Que, and E. Astuty, "Penyuluhan Penyakit Tidak Menular pada Masyarakat," *Community Development Journal*, vol. 2, no. 3, pp. 940–944, Nov. 2021.

[6]   N. A. Masdor, A. M. Nawi, R. Hod, Z. Wong, S. Makpol, and S.-F. Chin, "The Link between Food Environment and Colorectal Cancer: A Systematic Review," *Nutrients*, vol. 14, no. 19, p. 3954, Sep. 2022.

[7]   E. Gliwska and A. M. B. Kozakiewicz, "Alcohol availability, consumption, and knowledge of alcohol-related cancer risk among citizens of Warsaw," *Biuletyn Polskiego Towarzystwa Onkologicznego Nowotwory*, vol. 8, no. 4, pp. 296-301, 2023.

[8]   G. I. Prayoga, S. Rosidi, "Hubungan Aksesibilitas, Dukungan Milieu Sosial, Kesadaran Individu, dan Pertisipasi Aktif Olahraga Mahasiswa Jenjang Sarjana di Indonesia," *Indonesian Research Journal on Education*, vol. 4, no. 4, pp. 2092 – 2098, 2024.

[9] Atikah, "Konsep Optimalisasi Pergerakan Pejalan Kaki di Wonokromo (StudiKasus: Koridor Jalan Raya Wonokromo, Jalan Stasiun Wonokromo, dan Jalan Raya Darmo)," *Tesis Magister, Arsitektur, Institut Teknologi Sepuluh Nopember, Surabaya*, 2017. [Online]. Tersedia: https://repository.its.ac.id/47245/1/3214205005-Master_Theses.pdf. [Diakses Jan. 21, 2025].

[10] S. Kapsiani and B. J. Howlin, "*Random Forest* classification for predicting lifespan-extending chemical compounds," *Scientific Reports*, vol. 11, no. 1, Jul. 2021.

[11] GoodStats, "7 Provinsi dengan Prevalensi Kanker Tertinggi 2023," *GoodStats*, 2023. [Online]. Tersedia: https://data.goodstats.id/statistic/7-provinsi-dengan-prevalensi-kanker-tertinggi-2023-CNt4Y. [Diakses: Des. 25, 2024].

[12] G. Grekousis, "Artificial neural networks and deep learning in urban geography: A systematic review and meta-analysis," *Computers Environment and Urban Systems*, vol. 74, pp. 244–256, March. 2019.

[13] G. Grekousis, R. Wang, and Y. Liu, "Mapping the geodemographics of racial, economic, health, and COVID-19 deaths inequalities in the conterminous US," *Applied Geography*, vol. 135, p. 102558, Sep. 2021.

[14] A. M. S. Pradhan and Y.-T. Kim, "Rainfall-Induced shallow landslide susceptibility mapping at two adjacent catchments using advanced machine learning algorithms," *ISPRS International Journal of Geo-Information*, vol. 9, no. 10, p. 569, Sep. 2020.

[15] P. Andreopoulos, K. Kalogeropoulos, A. Tragaki, and N. Stathopoulos, "Could historical mortality data predict mortality due to unexpected events?," *ISPRS International Journal of Geo-Information*, vol. 10, no. 5, p. 283, Apr. 2021.

[16] M. S. Bannick, M. McGaughey, and A. D. Flaxman, "Ensemble modelling in descriptive epidemiology: burden of disease estimation," *International Journal of Epidemiology*, vol. 49, no. 6, pp. 2065–2073, Oct. 2019.

[17] R. Ha et al., "Convolutional neural network based breast cancer risk stratification using a mammographic dataset," *Academic Radiology*, vol. 26, no. 4, pp. 544–549, Apr. 2019.

[18] Y. Wankhade, S. Toutam, K. Thakre, K. Kalbande and P. Thakre, "Machine Learning Approach for Breast Cancer Prediction: A Review," *2nd International Conference on Applied Artificial Intelligence and Computing (ICAAIC), Salem, India*, pp. 566-570, 2023.

[19] R. Supriyadi et al., "Penerapan Algoritma *Random Forest* untuk Menentukan Kualitas Anggur Merah". *Jurnal Ilmiah Ekonomi dan Bisnis*, vol. Volume 13, pp. 67-75, Des. 2020.

[20] SHAP, "Welcome to the SHAP Documentation," *SHAP*, 2018. [Online]. Tersedia: https://SHAP.readthedocs.io. [Diakses: Jan. 21, 2025].

[21] I. Anggrenia, A. T. Priandika, and Y. Rahmanto, "Sistem Informasi Geografis Pemetaan Ukm Di Provinsi Lampung Berbasis Web Pada Uptd Plut Kumkm Provinsi Lampung (Studi Kasus : Uptd Plut Kumkm Provinsi Lampung)," *Jurnal Informatika Dan Rekayasa Perangkat Lunak,* vol. 3, no. 4, pp. 384–390, Feb. 2023.

[22] BAPPEDA Jawa Tengah, "Geografi Dan Demografi", *Bappeda Provinsi Jawa Tengah & Parastapa Technology*, 2020, [Online], Tersedia: https://edatabase.bappeda.jatengprov.go.id/images/311207_GEOGRAFI%2 0DAN%20DEMOGRAFI%202020.pdf. [Diakses: 25-December-2024]

[23] Kementerian Kesehatan Republik Indonesia, "Penyakit Tidak Menular (PTM)," *Kementerian Kesehatan Republik Indonesia*, [Online]. Available: https://yankes.kemkes.go.id/view_artikel/761/penyakit-tidak-menular-ptm.. [Diakses: Mar. 14, 2024].

[24] World Health Organization, "Cancer," *World Health Organization*, 2019. [Online]. Available: https://www.who.int/health-topics/cancer#tab=tab_1. [Diakses: Mar. 14,2024].

[25] R. Saran, E. Randolph, and K. L. Omollo, "Addressing the global Challenge of NCDs using a Risk Factor approach: voices from around the world," *FASEB BioAdvances*, vol. 3, no. 4, pp. 259–265, Feb. 2021.

[26] M. S., S. M., I. J. Vadakkiniath, and A. G., "Prevalence and correlates of stress, anxiety, and depression in patients with chronic diseases: a cross-sectional study," *Middle East Current Psychiatry*, vol. 30, no. 1, 2023.

[27] N. Azizunnisa, "Kontak dengan Alam Sebagai Media Penimimalisir Mengatasi Stres Ringan," *Jurnal Manajemen dan Pendidikan Agama Islam*, vol. 3, no. 2, pp. 284-297, 2025.

[28] A. Ali et al., "The Burden of Cancer, Government strategic policies, and challenges in Pakistan: A Comprehensive review," *Frontiers in Nutrition*, vol. 9, Jul. 2022.

[29] S. S. Hecht and D. K. Hatsukami, "Smokeless tobacco and cigarette smoking: chemical mechanisms and cancer prevention," *Nature Reviews*. Cancer, vol. 22, no. 3, pp. 143–155, Jan. 2022.

[30] H. Rumgay, N. Murphy, P. Ferrari, and I. Soerjomataram, "Alcohol and Cancer: Epidemiology and Biological mechanisms," *Nutrients*, vol. 13, no. 9, p. 3173, Sep. 2021.

[31] R. Balatif and A. A. M. Sukma, "Memahami Kaitan Gaya Hidup dengan Kanker: Sebagai Langkah Awal Pencegahan Kanker," *SCRIPTA SCORE Scientific Medical Journal*, vol. 3, no. 1, pp. 40–50, Aug. 2021.

[32] M. De Lorgeril, P. Salen, and M. Rabaeus, "Minuman Bergulaand cancer risk," *Translational Cancer Research*, vol. 9, no. 5, pp. 3172–3176, May 2020.

[33] Q. Xu, C. Lu, R. G. Murithi, and L. Cao, "Increase associated risk of gynaecological cancer due to long-term exposure to high concentration of atmospheric SO_2 industrial pollutant," *Indoor and Built Environment*, vol. 31, no. 8, pp. 2183–2192, Apr. 2021.

[34] A. Amadou et al., "Long-term exposure to nitrogen dioxide air pollution and breast cancer risk: A nested case-control within the French E3N cohort study," *Environmental Pollution*, vol. 317, p. 120719, Nov. 2022.

[35] C. Ssemugabo, S. Nalinya, G. B. Lubega, R. Ndejjo, and D. Musoke, "Health Risks in our Environment: Urban slum Youth' perspectives using photovoice in Kampala, Uganda," *Sustainability*, vol. 13, no. 1, p. 248, Dec. 2020.

[36] S. S. M. Ghayoumi and S. A. Nabavi, "A comprehensive review on data preprocessing methods in building energy consumption modeling," *Frontiers in Energy Research,* vol. 9, p. 652801, 2021.

[37] J. Han, J. Pei, and M. Kamber, *Data Mining: Concepts and Techniques*, 3rd ed. San Francisco, CA: Morgan Kaufmann, 2011. [Online]. Tersedia: https://myweb.sabanciuniv.edu/rdehkharghani/files/2016/02/The-Morgan-Kaufmann-Series-in-Data-Management-Systems-Jiawei-Han-Micheline-Kamber-Jian-Pei-Data-Mining.-Concepts-and-Techniques-3rd-Edition-Morgan-Kaufmann-2011.pdf. [Diakses: Jan. 21, 2025].

[38] D. C. Montgomery and G. C. Runger, *Applied Statistics and Probability for Engineers*, 7th ed. Hoboken, NJ: John Wiley & Sons, 2020. [Online]. Tersedia: https://kolegite.com/EE_library/books_and_lectures/%D0%9C%D0%B0%D1%82%D0%B5%D0%BC%D0%B0%D1%82%D0%B8%D0%BA%D0%B0/Douglas%20C.%20Montgomery%2C%20George%20C.%20Runger%20-%20Applied%20Statistics%20and%20Probability%20for%20Engineers-Wiley%20%282018%29.pdf. [Diakses: Jan. 21, 2025].

[39] M. S. Bartlett, "The use of transformations," *Biometrics*, vol. 3, no. 1, p. 39, Mar. 1947.

[40] A. A. Saputra, B. N. Sari, C. Rozikin, "Penerapan Algoritma Extreme Gradient Boosting (XGBoost) Untuk Analisis Risiko Kredit," *Jurnal Ilmiah Wahana Pendidikan*, vol 10, no. 7, pp. 27-36, 2024.

[41] Y. E. Touati, J. B. Slimane, and T. Saidani, "Adaptive method for feature selection in the machine learning context," *Engineering Technology & Applied Science Research*, vol. 14, no. 3, pp. 14295–14300, Jun. 2024.

[42] L. Breiman, "*Random Forest*", Machine Learning. 2001. 45, 5-32.

[43] V. F. Rodriguez-Galiano, M. Sanchez-Castillo, J. Dash, P. M. Atkinson, and J. Ojeda-Zujar, "Modelling interannual variation in the spring and autumn land surface phenology of the European forest," *Biogeosciences*, vol. 13, no. 11, pp. 3305–3317, Jun. 2016.

[44] F. Catani, D. Lagomarsino, S. Segoni, and V. Tofani, "Landslide susceptibility estimation by *Random Forest*s technique: sensitivity and

scaling issues," *Natural Hazards and Earth System Sciences*, vol. 13, no. 11, pp. 2815–2831, Nov. 2013.

[45] S. Georganos et al., "Geographical *Random Forest*s: a spatial extension of the *Random Forest* algorithm to address spatial heterogeneity in remote sensing and population modelling," *Geocarto International*, vol. 36, no. 2, pp. 121–136, Jun. 2019.

[46] W. Mohammed et al., "Application of machine learning and statistical modeling to identify sources of air pollutant levels in Kitchener, Ontario, Canada," *Environmental Science. Atmospheres*, vol. 2, no. 6, pp. 1389–1399, Jan. 2022.

[47] Future Machine Learning, "Preventing Overfitting in ML using Random Forests: Techniques," *Future Machine Learning*. 2023 [Online]. Tersedia: https://futuremachinelearning.org/preventing-overfitting-in-ml-using-random-forests-techniques. [Diakses: Jan. 5,2025].

[48] D. Markovics and M. J. Mayer, "Comparison of machine learning methods for photovoltaic power forecasting based on numerical weather prediction," *Renewable & Sustainable Energy Reviews*, vol. 161, p. 112364, Jun. 2022.

[49] J. Brownlee, "Hyperparameter Optimization with Random Search and Grid Search," *Machine Learning Mastery, 2020*. [Online]. Tersedia: https://machinelearningmastery.com/hyperparameter-optimization-with-random-search-and-grid-search/. [Diakses: Jan. 21, 2025].

[50] S. Andersson, "Exploring machine learning for predicting cancer risk: A comparative study," *KTH Royal Institute of Technology, Stockholm, Sweden,* 2023. [Online]. Tersedia: https://kth.diva-portal.org/smash/get/diva2:1806327/FULLTEXT01.pdf. [Diakses: Des. 25, 2025].

[51] D. Chicco, M. J. Warrens, and G. Jurman, "The coefficient of determination R-squared is more informative than SMAPE, MAE, MAPE, *MSE* and *RMSE* in regression analysis evaluation," *PeerJ. Computer Science*, vol. 7, p. e623, Jul. 2021.

[52] Z. Li, "Extracting spatial effects from machine learning model using local interpretation method: An example of *SHAP* and XGBoost," *Computers Environment and Urban Systems*, vol. 96, p. 101845, Jun. 2022.

[53] GeoPandas. "GeoPandas Documentation," *GeoPandas*, 2025. [Online]. Tersedia: https://geopandas.org/en/stable/. [Diakses: Jan. 21, 2025].

[54] S. Solikhah, D. Perwitasari, and D. Rejeki, "Geographic characteristics of various cancers in Yogyakarta Province, Indonesia: a spatial analysis at the community level," *Asian Pacific Journal of Cancer Prevention*, vol. 23, no. 4, pp. 1231–1238, Apr. 2022.

[55] G. Grekousis, Z. Feng, I. Marakakis, Y. Lu, and R. Wang, "Ranking the importance of demographic, socioeconomic, and underlying health factors on US COVID-19 deaths: A geographical *Random Forest* approach," *Health and Place/Health & Place*, vol. 74, p. 102744, Mar. 2022.

[56] A. Javaid, M. Sadiq, and F. Akram, "Skin cancer classification using image processing and machine learning," *2021 International Bhurban Conference on Applied Sciences and Technologies (IBCAST)*, Jan. 2021.

[57] M. Pal and S. Parija, "Prediction of Heart Diseases using *Random Forest*," *Journal of Physics. Conference Series*, vol. 1817, no. 1, p. 012009, Mar. 2021.

[58] L. Akter, N. Ferdib-Al-Islam, Md. M. Islam, M. S. Al-Rakhami, and Md. R. Haque, "Prediction of Cervical Cancer from Behavior Risk Using Machine Learning Techniques," *SN Computer Science/SN Computer Science*, vol. 2, no. 3, Mar. 2021.

[59] P. R. Anisha, C. K. K. Reddy, K. Apoorva, and C. M. Mangipudi, "Early Diagnosis of Breast Cancer Prediction using *Random Forest* Classifier," *IOP Conference Series. Materials Science and Engineering*, vol. 1116, no. 1, p. 012187, Apr. 2021.

[60] V. Jackins, S. Vimal, M. Kaliappan, and M. Y. Lee, "AI-based smart prediction of clinical disease using *Random Forest* classifier and Naive Bayes," *Journal of Supercomputing/Journal of Supercomputing*, vol. 77, no. 5, pp. 5198–5219, Nov. 2020.

[61] S. Kapsiani and B. J. Howlin, "Random forest classification for predicting lifespan-extending chemical compounds," Scientific Reports, vol. 11, no. 1, Jul. 2021.

[62] M. Dianati-Nasab *et al.*, "Machine learning algorithms to uncover risk factors of breast cancer: insights from a large case-control study," *Frontiers in Oncology*, vol. 13, Feb. 2024.

[63] M. Andraud, S. Bougeard, T. Chesnoiu, and N. Rose, "Spatiotemporal clustering and *Random Forest* models to identify risk factors of African swine fever outbreak in Romania in 2018–2019," *Scientific Reports*, vol. 11, no. 1, Jan. 2021.