

Daftar Pustaka

- AbdelRahman, M. A. E., Yossif, T. M. H., dan Metwaly, M. M. (2025). Enhancing land suitability assessment through integration of AHP and GIS-based for efficient agricultural planning in arid regions. *Scientific Reports*, 15, 31370. <https://doi.org/10.1038/s41598-025-14051-7>
- Acksan, B., Tjoneng, A., dan Saida, S. (2023). Evaluasi kesesuaian lahan untuk tanaman bawang merah (*Allium cepa* L.) di Kecamatan Malua Kabupaten Enrekang. *Jurnal AgrotekMAS*, 4(2), 164–173. <https://jurnal.fp.umi.ac.id/index.php/agrotekmas>
- Akinboyewa, T., Li, Z., Ning, H., dan Lessani, M. N. (2025). GIS Copilot: Towards an autonomous GIS agent for spatial analysis. *International Journal of Digital Earth*, 18(1), 2497489. <https://doi.org/10.1080/17538947.2025.2497489>
- Alamri, S. (2024). *The geospatial crowd: Emerging trends and challenges in crowdsourced spatial analytics*. *ISPRS International Journal of Geo-Information*, 13(6), 168. <https://doi.org/10.3390/ijgi13060168>
- Alfajri, W., Kristanto, W. A. D., dan Santoso, D. H. (2022). Evaluasi lahan berdasarkan kualitas dan karakteristik lahan pada bekas pertambangan tanah urug di Dusun Pucang Gading, Kelurahan Hargomulyo, Kapanewon Kokap, Kabupaten Kulon Progo, Daerah Istimewa Yogyakarta. Dalam Prosiding Seminar Nasional Teknik Lingkungan Kebumian Ke-IV: Pengembangan Wilayah Berbasis Tata Kelola Lingkungan Kebumian dan Manajemen Bencana (hlm. 173–178). Jurusan Teknik Lingkungan, Fakultas Teknologi Mineral, Universitas Pembangunan Nasional “Veteran” Yogyakarta.
- Arfiansyah, D., Han, H., dan Zlatanova, S. (2024). Land suitability analysis for residential development in an ecologically sensitive area: A case study of Nusantara, the new Indonesian capital. *Sustainability*, 16(13), 5767. <https://doi.org/10.3390/su16135767>
- Awoonor, J. K., Dogbey, B. F., dan Quansah, G. W. (2023). Soil suitability assessment for sustainable intensification of maize production in the humid Savannah of Ghana. *Frontiers in Sustainable Food Systems*, 7, 1094290. <https://doi.org/10.3389/fsufs.2023.1094290>
- Bilas, G., Karapetsas, N., Gobin, A., Mesdanitis, K., Toth, G., Hermann, T., Wang, Y., Luo, L., Koutsos, T. M., Moshou, D., dan Alexandridis, T. K. (2022). Land suitability analysis as a tool for evaluating soil-improving cropping systems. *Land*, 11(12), 2200. <https://doi.org/10.3390/land11122200>
- Dewi, E. S., Abdulai, I., Bracho-Mujica, G., dan Rötter, R. P. (2022). Salinity constraints for small-scale agriculture and impact on adaptation in North Aceh, Indonesia. *Agronomy*, 12(2), 341. <https://doi.org/10.3390/agronomy12020341>
- Diana, N., Hendrawan, H., dan Kurniawan, A. (2024). Analisis kesesuaian lahan untuk tanaman pangan di Kecamatan Sayan Kabupaten Melawi Provinsi Kalimantan Barat. *Jurnal Geografi Gea*, 24(2), 95–104. <https://doi.org/10.17509/gea.v24i2.52033>
- Dzokou, K. J. J., Boukong, A., Enang, R. K., Tapa, T. A. L., Mekoudja, A. H. H., dan Meyou, G. L. (2025). Soil characterization and land suitability evaluation for Egusi melon (*Citrullus mucosospermus*) cultivation in Bafia, Centre Region of Cameroon. *Open Journal of Soil Science*, 15(3), 199–223. <https://doi.org/10.4236/ojss.2025.153010>
- El Baroudy, A. A., Ali, A. M., Mohamed, E. S., Moghanm, F. S., Shokr, M. S., Savin, I., Poddubsky, A., Ding, Z., Kheir, A. M. S., Aldosari, A. A., Elfadaly, A., Dokukin, P., dan Lasaponara, R. (2020). *Modeling land suitability for rice crop using remote sensing and soil quality indicators: The case study of the Nile Delta*. *Sustainability*, 12(22), 9653. <https://doi.org/10.3390/su12229653>

- FAO. (1976). *Framework for land evaluation*. Food and Agriculture Organization of the United Nations. (Revised edition).
- Gao, Y., Xiong, Y., Gao, X., Jia, K., Pan, J., Bi, Y., Dai, Y., Sun, J., Wang, M., dan Wang, H. (2024). Retrieval-augmented generation for large language models: A survey. *arXiv preprint arXiv:2312.10997*. <https://doi.org/10.48550/arXiv.2312.10997>
- Hochmair, H. H. (2025). Use and effectiveness of chatbots as support tools in GIS programming course assignments. *ISPRS International Journal of Geo-Information*, 14(4), 156. <https://doi.org/10.3390/ijgi14040156>
- Hu, Y., dan Lu, Y. (2025). RAG and RAU: A survey on retrieval-augmented language model in natural language processing. *arXiv preprint arXiv:2404.19543*. <https://doi.org/10.48550/arXiv.2404.19543>
- Li, Z., dan Ning, H. (2023). Autonomous GIS: The next-generation AI-powered GIS. *International Journal of Digital Earth*, 16(2), 4668–4686. <https://doi.org/10.1080/17538947.2023.2278895>
- Li, Z., dan Ning, H. (2024). AI-augmented geographic information systems (GIS): A systematic literature review. *ISPRS International Journal of Geo-Information*, 13(9), 348. <https://doi.org/10.3390/ijgi13090348>
- Liu, X., Chen, M., Claramunt, C., Batty, M., Kwan, M.-P., Senousi, A. M., Cheng, T., Strobl, J., Cöltekin, A., Wilson, J., Bandrova, T., Konecny, M., Torrens, P. M., Zhang, F., He, L., Wang, J., Ratti, C., Kolditz, O., Klippel, A., Li, S., Lin, H., dan Lü, G. (2022). Geographic information science in the era of geospatial big data: A cyberspace perspective. *The Innovation*, 3(5), 100279. <https://doi.org/10.1016/j.xinn.2022.100279>
- Mansourian, A., dan Oucheikh, R. (2024). ChatGeoAI: Enabling geospatial analysis for public through natural language, with large language models. *ISPRS International Journal of Geo-Information*, 13(10), 348. <https://doi.org/10.3390/ijgi13100348>
- Mete, M. O. (2023). Geospatial big data analytics for sustainable smart cities. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-4/W7, 141–146. <https://doi.org/10.5194/isprs-archives-XLVIII-4-W7-2023-141-2023>
- Mooney, P., Cui, W., Guan, B., dan Juhász, L. (2023). Towards understanding the geospatial skills of ChatGPT: Taking a Geographic Information Systems (GIS) exam. On *Proceedings of the 6th ACM SIGSPATIAL International Workshop on AI for Geographic Knowledge Discovery (GeoAI '23)* (hlm. 1–10). ACM. <https://doi.org/10.1145/3615886.3627745>
- Mujiyo, M., Nugroho, D., Sutarno, S., Herawati, A., Herdiansyah, G., dan Rahayu, R. (2022). Evaluasi kemampuan lahan sebagai dasar rekomendasi penggunaan lahan di Kecamatan Ngadirojo Kabupaten Wonogiri. *Jurnal Agrikultura*, 33(1), 56–67. <https://doi.org/10.24198/agrikultura.v33i1.37950>
- n8n. (n.d.). *Powerful workflow automation software & tools*. Retrieved from <https://n8n.io/>
- Nguyen, T. T. (2009). Indexing PostGIS databases and spatial query performance evaluations. *International Journal of Geoinformatics*, 5(3), 25–35.
- Qdrant Docs. (2025). *Introduction to Qdrant: Vector Search Engine for AI and Machine Learning*. Retrieved from <https://qdrant.tech/documentation>
- Rahmadi, A., Fazlina, Y. D., dan Rusdi, M. (2023). *Penyusunan WebGIS lahan pertanian pangan berkelanjutan (LP2B) menggunakan aplikasi ArcGIS Online*. *Jurnal Ilmiah Mahasiswa Pertanian*, 8(2), 427–432. Universitas Syiah Kuala. <https://www.jim.usk.ac.id/JFP>
- Rachmawati, R., Ghiffari, R. A., Wijdani, A. F., Qonita, M., Tania, N., dan Pigawati, B. (2024). Optimizing GISTARU: Evaluating a GIS-based platform's contribution to Indonesian spatial planning for smart city development. *GeoPlanning: Journal of*

Geomatics and Planning, 11(1), 57–70.
<https://doi.org/10.14710/geoplanning.11.1.57-70>

- Rizaldi, T., Putranto, H. A., dan Kurniasari, A. A. (2024). Implementation of agile methods in GIS web applications for land suitability selection. *IOP Conference Series: Earth and Environmental Science*, 1338(1), 012054. <https://doi.org/10.1088/1755-1315/1338/1/012054>
- Seif-Ennasr, M., Bouchaou, L., El Morjani, Z. E. A., Hirich, A., Beraaouz, E. H., dan Choukr-Allah, R. (2020). GIS-based land suitability and crop vulnerability assessment under climate change in Chtouka Ait Baha, Morocco. *Atmosphere*, 11(11), 1167. <https://doi.org/10.3390/atmos11111167>
- Supabase Docs. (2024). *pgvector: Embeddings and vector similarity*. Retrieved from <https://supabase.com/docs/guides/database/extensions/pgvector>
- Supabase Docs. (2024). *Edge functions for AI and database automation*. Retrieved from <https://supabase.com/docs/guides/functions>
- Vinueza-Martinez, J., Correa-Peralta, M., Ramirez-Anormaliza, R., Franco Arias, O., dan Vera Paredes, D. (2024). Geographic information systems (GISs) based on WebGIS architecture: Bibliometric analysis of the current status and research trends. *Sustainability*, 16(15), 6439. <https://doi.org/10.3390/su16156439>
- Wang, X., Wang, R., dan Gao, J. (2022). Precipitation and soil nutrients determine the spatial variability of grassland productivity at large scales in China. *Frontiers in Plant Science*, 13, 996313. <https://doi.org/10.3389/fpls.2022.996313>