



DAFTAR PUSTAKA

- Agarwal, A., Sharma, S., Kumar, V., and Kaur, M. 2021. Effect of E-Learning on public health and environment during COVID-19 lockdown, *Big Data Mining and Analytics*, 4(2): 104– 115.
- Aryani, Y., and Gustian, D. 2020. Sistem Informasi Penjualan Barang dengan Metode Regresi Linear Berganda Dalam Prediksi Pendapatan Perusahaan. *JURSISTEKNI (Jurnal Sistem Informasi dan Teknologi Informasi)*, 2(2), 39-51.
- Balafoutis, A.T., Evert, F.K., and Fountas, S. 2020. Smart Farming Technology Trends: Economic and Environmental Effects, Labor Impact, and Adoption Readiness. *Agronomy*.
- Bellavista, P., Foschini, L., and Scotece, D. 2017. Converging Mobile Edge Computing, Fog Computing, and IoT Quality Requirements. *IEEE 5th International Conference on Future Internet of Things and Cloud (FiCloud)*, Prague, Czech Republic, pp. 313-320, doi: 10.1109/FiCloud.2017.55.
- Cao-hoang, T., and Duy, C.N. 2017. *Environment Monitoring System for Agricultural Application Based on Wireless Sensor Network*. Da Nang, Vietnam, s.n., pp. 99-102.
- Dagar, R., Som, S., and Khatri, S.K. 2018. Smart Farming – IoT in Agriculture. *International Conference on Inventive Research in Computing Applications (ICIRCA)*, pp.1052-1056.
- Data, M., Yahya, W., and Kurniawan, A.P. 2020. Implementasi Teknologi Virtualisasi Berbasis Kontainer untuk Perangkat Internet of Things pada Pertanian Presisi. *CYBERNETICS*, 3(1): 1-7.
- Do, T.V. 2009. Controlling Lease Time in Dynamic Host Configuration Protocol Servers. *Journal of Research and Development on Information and Communication Technology*, E-3(4).
- Efendi, R., and Sagita, D.M. 2022. Teknologi pertanian masa depan dan peranannya dalam menunjang ketahanan pangan. *Sultra Journal of Mechanical Engineering (SJME)*, 1(1).
- ETSI. 2002. Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON) Release 3; End-to-end Quality of Service in TIPHON systems; Part 7: Design guide for elements of a TIPHON Connection from an end-to-end speech transmission performance point of. *ETSI*.
- Gage, Anastasia and Melissa Dunn. 2009. *Monitoring and Evaluating Gender-Based Violence Prevention and Mitigation Programs*. U.S. Agency for International Development, MEASURE Evaluation, Interagency Gender Working Group, Washington DC.
- Gebbers, R., and Adamchuk, V. I. 2010. Precision Agriculture and Food Security. *In Science*, 327(967): 828–831. <https://Doi.Org/10.1126/Science.1183899>
- Ghozali, I. 2016. *Aplikasi Analisis Multivariete Dengan Program IBM SPSS 23* (Edisi 8). Semarang: Badan Penerbit Universitas Diponegoro.



- Gupta, M., Abdelsalam, M., Khorsandoo, S., and Mittal, S. 2020. Security and Privacy in Smart Farming: Challenges and Opportunities. *IEEE Access*, 8: 34564-34584.
- Gurrapu, S., Sikder, N., Wang, P., Gorentala, N., Williams, M.K., and Batarseh, F.A. 2021. Applications of Machine Learning For Precision Agriculture and Smart Farming. *The International FLAIRS Conference Proceedings*, 34.
- Heizer, J., and Render, B. 2015. *Manajemen Operasi*. Jakarta: Salemba Empat.
- Huang, H., Lin, J., Wu, L., Fang, B., Wen, Z., and Sun, F. Machine learning-based multi-modal information perception for soft robotic hands, *Tsinghua Science and Technology*, 25(2): 255–269.
- Jeaunita, T. J., Sarasvathi, V., Harsha, M., Bhavani, B., and Kavyashree, T. 2018. An automated greenhouse system using agricultural Internet of Things for better crop yield. *in Proc. Smart Cities Symp.*, pp. 129–134.
- Ksentini, A., and Frangoudis, P.A. 2020. On Extending ETSI MEC to Support LoRa for Efficient IoT Application Deployment at the Edge. *IEEE Communications Standards Magazine*, 4: 57-63.
- Khafi, A. M., Erwanto, D., and Utomo, Y. B. 2019. Sistem Kendali Suhu Dan Kelembaban Pada Greenhouse Tanaman Sawi Berbasis IoT. *In Generation Journal*, 3(2).
- Khair, U., Fahmi, H., Al Hakim, S., and Rahim, R. 2017. Forecasting error calculation with mean absolute deviation and mean absolute percentage error. *In journal of physics: conference series* (Vol. 930, No. 1, p. 012002). IOP Publishing.
- Li, Y., Liao, C., Wang, Y., and Wang, C., Energy-efficient optimal relay selection in cooperative cellular networks based on double auction, *IEEE Transactions on Wireless Communications*, 14(8): 4093–4104.
- Li, Y., Liu, J., Cao, B., and Wang, C. 2018. Joint optimization of radio and virtual machine resources with uncertain user demands in mobile cloud computing, *IEEE Transactions on Multimedia*, 20(9): 2427–2438.
- Li, Y., Xia, S., Cao, B., Liu, et al., Lyapunov optimization based trade-off policy for mobile cloud offloading in heterogeneous wireless networks, *in IEEE Transactions on Cloud Computing*, 10(1): 491-505, doi: 10.1109/TCC.2019.2938504.
- Maricar, M. A. 2019. Analisa Perbandingan Nilai Akurasi Moving Average dan Exponential Smoothing untuk Sistem Peramalan Pendapatan pada Perusahaan XYZ. *Jurnal Sistem dan Informatika*, 13(2), 1-10.
- Marinello, F., Gatto, S., Bono, A., and Pezzuolo, A. 2017. Determination of local nitrogen loss for exploitation of sustainable precision agriculture: approach description. *ENGINEERING FOR RURAL DEVELOPMENT*, pp. 713-718, doi: 10.22616/ERDev2017.16.N144.
- Mas, F.A., Suciyati, S.W., Pauzi, G.A., and Junaidi, J. 2022. Smart Greenhouse Monitoring With Soil Temperature and Humidity Control on Internet of Things (IoT) Based Orchid Plants. *Journal of Energy, Material, and Instrumentation Technology*, 3(3): 80-88.



- Mulyono, S., Qomaruddin, M. and Anwar, M.S., 2018. Penggunaan Node-RED pada sistem monitoring dan kontrol *greenhouse* berbasis protokol MQTT. *TRANSISTOR Elektro Dan Informatika*, 3(1): 31-44.
- Murtianta, B., Danis Ronaldo, S., and Susilo, D. 2022. Perancangan Prototype Smart Indoor Greenhouse IoT untuk Membantu Permasalahan Budidaya Tanaman Selada di Kota Kupang. *Techné : Jurnal Ilmiah Elektroteknika*. 21(2): 297-310.
- Naets, B., Raes, W., Devillé, R., Middag, C., Stevens, N., and Minnaert, B. 2022. Artificial Intelligence for Smart Cities: Comparing Latency in Edge and Cloud Computing. *2022 IEEE European Technology and Engineering Management Summit (E-TEMS)*, pp. 55-59.
- Nugroho, A.P., Okayasu, T., Horimoto, M., Arita, D., Hoshi, T., Kuroski, H., and Sutiarso, L. 2016. Development of A Field Environmental Monitoring Node with Over the Air Update Function. *Journal of Agricultural Information Research*. 25(3): 86-95
- Nugroho, A.P., Fadilah, M.A.N., Wiratmoko, A., Azis, Y.A., Efendi, A.W., Sutiarso, L., and Okayasu, T. 2019. Implementation of Crop Growth Monitoring System Based on Depth Perception Using Stereo Camera in Plant Factory. *AESAP 2019*. Bogor. doi: 10.1088/1755-1315/542/1/012068
- Pallavi, S. Mallapur, J. D., and Bendigeri, K. Y. 2017. Remote sensing and controlling of *greenhouse* agriculture parameters based on *IoT*. *Proc. IEEE Int. Conf. Big Data IoT Data Sci. (BID)*, Pune, India. pp. 44–48.
- Pitono, J. 2020. Pertanian Presisi dalam Budidaya Lada. *Perspektif*, 18(2): 99-111
- Policy Department B: Structural and Cohesion Policies. 2014. *Precision Agriculture: An Opportunity for EU Farmers-Potential Support with The Cap 2014-2020*. European Union, Brussels.
- Rachmawati, R. R. 2020. *Smart Farming* 4.0 untuk Mewujudkan Pertanian Indonesia Maju, Mandiri, dan Modern. *Forum Penelitian Agro Ekonomi*, 38(2): 137-154.
- Rajput, A., and Mary, S.A. 2022. Review Report on Smart Farming (*IoT* Based Agriculture). *Advancement of IoT in Blockchain Technology and its Applications*, 1(2).
- Riyanto, D. P., Taurano, G.A., Prasetyo, W., and Arisanto, P. 2020. Pengelolaan Bendungan Pada Era Revolusi Industri 4.0. *Majalah Ilmiah Pengembangan Rekayasa dan Sosial*, 16(2): 117-123.
- Rodolfo W. L. Coutinho. 2021. Tutorial: Edge Computing for Mobile Internet of Things. *In Proceedings of the 11th ACM Symposium on Design and Analysis of Intelligent Vehicular Networks and Applications (DIVANet '21)*. Association for Computing Machinery, New York, NY, USA, 1. <https://doi.org/10.1145/3479243.3494705>
- Romdhonah, Y., Suhardiyanto, H., Erizal, and Saptomo, S.K. 2014. DISTRIBUSI SUHU UDARA DAN RH DI DALAM RUMAH TANAMAN TIPE STANDARD PEAK MENGGUNAKAN COMPUTATIONAL FLUID DYNAMICS. *Jurnal Ilmu Pertanian dan Perikanan*, 3(2): 125-133.



- Talaviya, T., Shah, D., Patel, N., Yagnik, H., & Shah, M. 2020. Implementation of artificial intelligence in agriculture for optimisation of irrigation and application of pesticides and herbicides. *Artificial Intelligence in Agriculture*, 4: 58–73. <https://doi.org/10.1016/j.aiia.2020.04.002>
- Tiwari, G. 2003. *Greenhouse Technology for Controlled Environment*. Harrow, U.K.: Alpha Sci. Int. Ltd.
- Sargent, R. G. 2010. Verification and Validation of Simulation Models. *Proceedings of the 2010 Winter Simulation Conference*, pp 166-183.
- Shi, W., Cao, J., Zhang, Q., Li, Y., and Xu, L. 2016. Edge Computing: Vision and Challenges. *IEEE Internet of Things Journal*, 3: 637-646.
- Sumardi, Said dan Ilham Syahputra. 2018. Rancang Bangun Monitoring Ketinggian Air dan Sistem Kontrol pada Pintu Air Berbasis Arduino dan Sms Gateway. *Jurnal Teknik Universitas Muhammadiyah Tangerang*, 7: 77-91.
- Sowmiya, M., and Prabavathi, S. 2019. Smart Agriculture Using IoT and Cloud Computing. *International Journal of Recent Technology and Engineering (IJRTE)*, 7(6S3): 251-255.
- Wiangtong, T and Sirisuk, P. 2018. IoT-based Versatile Platform For Precision Farming. in Proc. IEEE 18th Int. Symp. Commun. Inf. Technol. (ISCIT), pp. 438–441
- Vaishnavi, S., and Vasuki, M.J. 2016. Resource Allocation and Data Provisioning for Data Centers in Cloud. *Computer Science*
- Viloria, A., Rosania Altahona, T.A., and Pineda Lezama, O.B. 2020. Energy Balance in a Greenhouse: Temperature and Humidity Monitoring. *IOP Conference Series: Materials Science and Engineering*, 872, doi:10.1088/1757-899X/872/1/012196.
- Walter, A., Finger, R., Huber, R., and Buchmann, N. 2017. Smart farming is key to developing sustainable agriculture. *Proc. Natl Acad Sci USA*. 114(24):6148–6150.doi:10.1073/pnas.1707462114
- Widayati, C. S. W. 2009. Komparasi Beberapa Metode Estimasi Kesalahan Pengukuran. *Jurnal Penelitian dan Evaluasi Pendidikan*, 13(2), 182-197
- Wolfert, S., Ge, L., Verdouw, C., and Bogaardt, M. J. 2017. Big Data in Smart Farming – A review. *Agricultural Systems*, 153: 69-80.
- Xu, J., Li, Y., Wang, R., Liu, W., and Zhou, P. 2015. Experimental performance of evaporative cooling pad systems in greenhouses in humid subtropical climates. *Appl. Energy*, 138: 291–301.
- Xu, X., Mo, R., Yin, X., Khosravi, M. R., Aghaei, F., Chang, V., Li, G. 2020. Pdm: Privacy-aware deployment of machine-learning applications for industrial cyber-physical cloud systems, *IEEE Transactions on Industrial Informatics*. doi:10.1109/TII.2020.3031440
- Xu, X., Shen, B., Ding, S., Srivastava, G., Bilal, M. M., Khosravi, R., Menon, V. G., Jan, M.A., and Maoli, W. 2020. Service Offloading with Deep Q-Network for Digital Twinning Empowered Internet of Vehicles in Edge Computing, *IEEE Transactions on Industrial Informatics*. doi:10.1109/TII.2020.3040180.



- Yang, Y., Ding, S., Liu, Y., Meng, S., Chi, X., Ma, R., and Yan, C. 2022. Fast wireless sensor for anomaly detection based on data stream in an edge-computing-enabled *smart greenhouse*. *Digital Communications and Networks*, 8(4): 498-507.
- Yu, S., Chen, X., Zhou, Z., Gong, X., Wu, D. 2022. When Deep Reinforcement Learning Meets Federated Learning: Intelligent Multi-Timescale Resource Management for Multi-access Edge Computing in 5G Ultra Dense Network. *arXiv:2009.10601*. <https://doi.org/10.48550/arXiv.2009.10601>