



DAFTAR PUSTAKA

- [1] Ali, Z. H., Ali, H. A., & Badawy, M. M. (2015). *Internet of Things (IoT): Definitions, Challenges, and Recent Research Directions*. *International Journal of Computer Applications*, 128–128(No.1), 37–38. <https://www.researchgate.net/publication/320532203>
- [2] Ammar I, Ennouri M, Bali O, Attia H. *Characterization of two prickly pear species flowers growing in Tunisia at four flowering stages LWT. Food Sci. Technol.* 2014;59:448e454.
- [3] Anggaria, M., & Wowor, E. (2015). Kajian Potensi Komoditas Tanaman Pangan Di Kabupaten Minahasa. Cocos, 6(4).
- [4] AS Mufid, R. Munady, and R. Mayasari, “Perancangan Internet Of Things (Iot) Dan Implementasi Smart Garden Berbasis Internet Of Things (Iot),” Bandung, 2020.
- [5] Atmaja, A. P., Hakim, A. E., Wibowo, A. P. A., & Pratama, L. A. (2021). Communication Systems of Smart Agriculture Based on Wireless Sensor Networks in IoT. *Journal of Robotics and Control (JRC)*, 2(4). <https://doi.org/10.18196/jrc.2495>
- [6] Ayaz, M., Ammad-Uddin, M., & Aggoune, E. H. M. (2019). Internet-of-Things (IoT)-Based Smart Agriculture: Toward Making the Fields Talk. In *Sensor Networks and Cellular Systems Research Center, University of Tabuk, Tabuk 71491, Saudi Arabia* (Vol. 7, p. 129551). <https://doi.org/10.1109/ACCESS.2019.2932609>
- [7] A. K. Nalendra and M. Mujiono, “Perancangan Perancangan IoT (Internet of Things) Pada Sistem Irigasi Tanaman Cabai,” Gener. J., vol. 4, no. 2, pp. 61–68, 2020, doi: 10.29407/gj.v4i2.14187.
- [8] Budiman, E. O. P., Daud, A., & Pratama, M. R. B. (2022). Pembuatan Alat Kendali dan Monitoring Kelembaban Tanah, Level Air, Konsumsi Energi Pada Prototype *Smart Garden* Berbasis Arduino dan IOT. In *Jurnal Energi* (Vols. 2–2).
- [9] Darmawan, I., Kumara, I., & Khirisne, D. (2021). *Smart Garden* Sebagai Implementasi Sistem Kontrol dan Monitoring Tanaman Berbasis Teknologi Cerdas. In *Jurnal SPEKTRUM* (Vol. 8, Issue 4).
- [10] D. P. Diwanti, “Pemanfaatan Pekarangan Rumah Warga Dengan Teknik Budidaya Tanaman Kaktus Hias,” Martabe J. Pengabdi. Kpd. Masy., vol. 4, no. 1, p. 351, 2021, doi: 10.31604/jpm.v4i1.351-356.
- [11] Daoliang Li, Yingyi Chen, Oct. 2010, Computer and Computing Technologies in Agriculture. Springer, 24-31.
- [12] FATHONAH, I. N. (2019). Evaluasi Fungsi Ekologis Dan Estetika Beberapa Ruang Terbuka Hijau Publik Di Kota Tasikmalaya. <https://doi.org/10.31237/osf.io/vcqtw>.
- [13] F. Puspasari, T. P. Satya, U. Y. Oktiawati, I. Fahrurrozi, and H. Prisyanti, “Analisis Akurasi Sistem Sensor DHT22 berbasis Arduino terhadap



Thermohygrometer Standar," *Jurnal Fisika Dan Aplikasinya*, vol. 16, no. 1, pp. 40–45, Feb. 2020, doi: 10.12962/j24604682.v16i1.5717.

- [14] Gunawan, R., Andhika, T., Sandi, & Hibatulloh, F. (2019). Monitoring System for Soil Moisture, Temperature, pH and Automatic Watering of Tomato Plants Based on Internet of Things. *Telekontran Jurnal Ilmiah Telekomunikasi Kendali Dan Elektronika Terapan*, 7(1), 66–78. <https://doi.org/10.34010/telekontran.v7i1.1640>.
- [15] Heriyawan, I. M. D., Widnyana, K. D., Darma, K. D. S. A., & Budiada, I. M. (2022). Analisis Monitoring dan Kontrol Nilai Kelembaban Tanah Dengan Sistem Smart Farming dan Soil Meter. In *Jurnal Teknologi Pertanian Andalas* (Vol. 26, Issue 1, p. 93).
- [16] InternetofThings,2015<http://www.rfidjournal.com/articles/view?4986>.
- [17] Kartika, T. (2018). Pemanfaatan Tanaman Hias Pekarangan Berkhasiat Obat di Kecamatan Tanjung Batu. *Sainmatika: Jurnal Ilmiah Matematika Dan Ilmu Pengetahuan Alam*, 15(1), 48. <https://doi.org/10.31851/sainmatika.v15i1.1782>.
- [18] K. Affandi, “Rancang Bangun Smart Garden Berbasis Internet Of Thing (IoT) dengan Bot Telegram,” Semin. tidak. Teknologi. Inf. dan Komun., hal.165–169, 2019.
- [19] Lutfiyana, Hudallah, N., & Suryanto, A. (2017b). Rancang Bangun Alat Ukur Suhu Tanah, Kelembaban Tanah, dan Resistansi. *Jurnal Teknik Elektro*, 9(2), 80.
- [20] L. Atzori, A. Iera, G. Morabito, The Internet of Things: Survey. *Computer networks*, 2787–2805.
- [21] Madakam, S., Ramaswamy, R., & Tripathi, S. (2015). Internet of Things (IoT): A Literature Review. *Journal of Computer and Communications*, 03(05), 164–173. <https://doi.org/10.4236/jcc.2015.35021>.
- [22] Mukhlis, W., Yohandri, Yulkifli, & Mairizwan. (2023b). Smart Garden System Based on Internet of Things using NodeMCU ESP8266. *PILLAR OF PHYSICS EDUCATION*, 16(2). <https://doi.org/10.24036/13455171074>.
- [23] Mulyani, A., Ritung, S., & Las, I. (2016). Potensi dan Ketersediaan Sumberdaya Lahan untuk Mendukung Ketahanan Pangan. *Jurnal Penelitian Dan Pengembangan Pertanian*, 30(2), 73–80. <https://doi.org/10.21082/jp3.v30n2.2011.p73-80>.
- [24] Morton, F. I. (1968). Evaporation and Climate: A Study in Cause and Effect, Scientific Series no. 4. Inland Water Branch, Department of Energy, Mines and Resources, Ottawa.
- [25] M. Sheth and P. Rupani, “Smart Gardening Automation using IoT with BLYNK App,” Proc. Int. Conf. Trends Electron. Informatics, ICOEI 2019, vol. 2019-April, no. Icoei, pp. 266–270, 2019, doi: 10.1109/icoei.2019.8862591.
- [26] Naufal, F., Ariyanto, E., & Nuha, H. H. (2023). Peningkatan Pertumbuhan



- Tanaman Cabai Menggunakan Smart Garden Berbasis IoT. *LOGIC Jurnal Penelitian Informatika*, 1(1), 79. <https://doi.org/10.25124/logic.v1i1.6480>.
- [27] Nisa, E. C. (2015). Jurnal Arboretum Tanaman Hias di Kota Batu | 2. 1–10.
 - [28] Nihong Wang, Wenjing Wu, 2012 The Architecture Analysis of Internet of Things, Computer and Computing Technologies in Agriculture V IFIP Advances in Information and Communication Technology, 193-198.
 - [29] N. binti A. Sulaiman dan MDD bin S. Sadli,Taman Cerdas berbasis IoT dengan Sistem Stasiun Cuaca. 2019.
 - [30] N. H. A. Rahim, F. N. Ahmad Zaki, and A. S. M. Noor, “Smart App for Gardening Monitoring System using IoT Technology,” Int. J. Adv. Sci. Technol., vol. 29, no. 04, pp. 7375–7384, 2020.
 - [31] N. Mukhayat, P. W. Ciptadi, and R. H. Hardyanto, “Sistem Monitoring pH Tanah, Intensitas Cahaya Dan Kelembaban Pada Tanaman Cabai (Smart Garden) Berbasis IoT,” 2021.
 - [32] Paiva, P., Souza, I., Costa, M., Santos, A., & Coelho, L. (2016). Opuntia sp. Cactus: Biological Characteristics, Cultivation and Applications. *Advances in Research*, 7(3), 1–14. <https://doi.org/10.9734/air/2016/26125>.
 - [33] Pauzan, M. (2019). Rancangan Alat Indikator Level Tegangan Baterai Berbasis Operational Amplifier (Op Amp). *TEKNOKOM*, 2(1), 11–16. <https://doi.org/10.31943/teknokom.v2i1.26>
 - [34] Prihanto, A., Rachmawati, N., & Prapanca, A. (2021). Smart Garden Automation Dengan Memanfaatkan Teknologi Berbasis Internet Of Things (IoT). In *JIEET: Volume 05 Nomor 02* (pp. 55–56).
 - [35] Romli, I., Hugo, K. L. N., & Afriantoro, I. (2021). Perancangan dan Implementasi *Smart Garden* Berbasis Internet of Things (IOT) Pada Perumahan Central Park Cikarang. *Indonesian Journal of Business Intelligence (IJUBI)*, 4(2), 42. <https://doi.org/10.21927/ijubi.v4i2.1974>.
 - [36] Sandi, G. H., & Fatma, Y. (2023). Pemanfaatan Teknologi Internet of Things (IoT) Pada Bidang Pertanian. In *JATI (Jurnal Mahasiswa Teknik Informatika)* (Vol. 7, Issue 1).
 - [37] Suryaningrat, A., Kurnianto, D., & Rochmanto, R. A. (2022). Sistem Monitoring Kelembaban Tanaman Cabai Rawit menggunakan Irigasi Tetes Gravitasi berbasis Internet Of Things (IoT). *ELKOMIKA Jurnal Teknik Energi Elektrik Teknik Telekomunikasi & Teknik Elektronika*, 10(3), 568. <https://doi.org/10.26760/elkomika.v10i3.568>.
 - [38] Suwandi, G. R. F., Alfan, M. G., Haryokusuma, W., & Nurhidayat, M. (2014). Sistem Pendekripsi Golongan Darah Manusia Menggunakan Komparator dan Komponen Opto Elektronik (LDR dan LED). *Jurnal Pengajaran Fisika Sekolah Menengah*, 6(1), 5.
 - [39] Tadeus, D., Subari, A., & Manan, S. (2017). Realisasi Pengendali On-Off Histerisis Dengan Operational Amplifier (OpAmp). *GEMA TEKNOLOGI*, 19(4), 5.



RANCANG BANGUN DAN ANALISIS KINERJA SMART GARDEN BERBASIS INTERNET OF THINGS TERINTEGRASI APLIKASI

BLYNK

MUHAMMAD NURHANNAN, Unan Yusmaniar Oktiawati, S.T., M.Sc., Ph.D

UNIVERSITAS
GADJAH MADA

[40] V. A. Suci and H. I. Mosey, "Rancang Bangun Alat Pengukur Suhu Tanah Secara Multi Lateral Berbasis Mikrokontroler Untuk Pertumbuhan Benih Tanaman," J. MIPA, vol. 6, no. 2, pp. 97–100, 2017, doi: 10.35799/jm.6.2.2017.17962.

- [41] Y. Efendi, "Internet Of Things (Iot) Sistem Pengendalian Lampu Menggunakan Raspberry Pi Berbasis Mobile," J.Ilm. Ilmu Komput., jilid. 4, tidak. 2, hal. 21–27, 2018, doi: 10.35329/jiik.v4i2.41.