

DAFTAR PUSTAKA

- Abed, A., Akrouit, B., & Amous, I. (2023). Semantic Heads Segmentation and Counting in Crowded Retail Environment with Convolutional Neural Networks Using Top View Depth Images. *SN Computer Science*, 4(1). <https://doi.org/10.1007/s42979-022-01467-5>
- Ahmed, K., Gad, M. A., & Aboutabl, A. E. (2022). Performance Evaluation of Salient Object Detection Techniques. *Multimedia Tools and Applications*, 81(15). <https://doi.org/10.1007/s11042-022-12567-y>
- AlBadani, B., Shi, R., & Dong, J. (2022). A Novel Machine Learning Approach for Sentiment Analysis on Twitter Incorporating the Universal Language Model Fine-Tuning and SVM. *Applied System Innovation*, 5(1). <https://doi.org/10.3390/asi5010013>
- Alfian, G., Octava, M. Q. H., Hilmy, F. M., Nurhaliza, R. A., Saputra, Y. M., Putri, D. G. P., Syahrin, F., Fitriyani, N. L., Atmaji, F. T. D., Farooq, U., Nguyen, D. T., & Syafrudin, M. (2023). Customer Shopping Behavior Analysis Using RFID and Machine Learning Models. *Information (Switzerland)*, 14(10). <https://doi.org/10.3390/info14100551>
- Al-Haqam, R. F., & Hamali, A. Y. (2016). The Influence of Service Quality toward Customer Loyalty: A Case Study at Alfamart Abdurahman Saleh Bandung. *Binus Business Review*, 7(2). <https://doi.org/10.21512/bbr.v7i2.1686>
- Ali, Y. A., Awwad, E. M., Al-Razgan, M., & Maarouf, A. (2023). Hyperparameter Search for Machine Learning Algorithms for Optimizing the Computational Complexity. *Processes*, 11(2). <https://doi.org/10.3390/pr11020349>
- Ardi Samudra Rochmattulloh. (2023). The Effect Of Online Learning On Increasing Student Learning Outcomes At Sdn Taman Baru. *Sosioedukasi Jurnal Ilmiah Ilmu Pendidikan Dan Sosial*, 12(1). <https://doi.org/10.36526/sosioedukasi.v12i1.2395>
- Arkin, E., Yadikar, N., Xu, X., Aysa, A., & Ubul, K. (2023). A Survey: Object Detection Methods from CNN to Transformer. *Multimedia Tools and Applications*, 82(14). <https://doi.org/10.1007/s11042-022-13801-3>
- Asghar, S., Gilanie, G., Saddique, M., Ullah, H., Mohamed, H. G., Abbasi, I. A., & Abbas, M. (2023). Water Classification Using Convolutional Neural Network. *IEEE Access*, 11. <https://doi.org/10.1109/ACCESS.2023.3298061>
- Aydinli, A., Lamey, L., Millet, K., ter Braak, A., & Vuegen, M. (2021). How Do Customers Alter Their Basket Composition When They Perceive the Retail Store to Be Crowded? An Empirical Study. *Journal of Retailing*, 97(2). <https://doi.org/10.1016/j.jretai.2020.05.004>
- Ayele, W. Y. (2020). Adapting CRISP-DM for Idea Mining a Data Mining Process for Generating Ideas Using a Textual Dataset. *International Journal of Advanced Computer Science and Applications*, 11(6). <https://doi.org/10.14569/IJACSA.2020.0110603>

- Badr, M. M. (2019). Goodness-of-fit tests for the Compound Rayleigh distribution with application to real data. *Heliyon*, 5(8). <https://doi.org/10.1016/j.heliyon.2019.e02225>
- Bascur, C., & Rusu, C. (2020). Customer Experience in Retail: A Systematic Literature Review. *Applied Sciences (Switzerland)*, 10(21). <https://doi.org/10.3390/app10217644>
- Boutahir, M. K., Farhaoui, Y., Azrour, M., Zeroual, I., & El Allaoui, A. (2022). Effect of Feature Selection on the Prediction of Direct Normal Irradiance. *Big Data Mining and Analytics*, 5(4). <https://doi.org/10.26599/BDMA.2022.9020003>
- Brkić, I., Ševrović, M., Medak, D., & Miler, M. (2023). Utilizing High Resolution Satellite Imagery for Automated Road Infrastructure Safety Assessments. *Sensors*, 23(9). <https://doi.org/10.3390/s23094405>
- C, L., S, P., Kashyap, A. H., Rahaman, A., Niranjana, S., & Niranjana, V. (2023). Novel Biomarker Prediction for Lung Cancer Using Random Forest Classifiers. *Cancer Informatics*, 22. <https://doi.org/10.1177/11769351231167992>
- Chandrashekar, K., Setlur, A. S., Sabhapathi C, A., Raiker, S. S., Singh, S., & Niranjana, V. (2023). Decision Support System and Web-Application Using Supervised Machine Learning Algorithms for Easy Cancer Classifications. *Cancer Informatics*, 22. <https://doi.org/10.1177/11769351221147244>
- Chen, S., Wang, P., & Wood, J. (2023). What is a Retail Brand - a Systematic Review of Terms and Definitions. Dalam *International Journal of Retail and Distribution Management* (Vol. 51, Nomor 5, hlm. 653–673). Emerald Publishing. <https://doi.org/10.1108/IJRDM-06-2022-0187>
- Chimphlee, S., & Chimphlee, W. (2023). Machine Learning to Improve the Performance of Anomaly-Based Network Intrusion Detection in Big Data. *Indonesian Journal of Electrical Engineering and Computer Science*, 30(2). <https://doi.org/10.11591/ijeecs.v30.i2.pp1106-1119>
- Del Carpio, A. F. (2024). Analyzing Computer Vision Models for Detecting Customers: Practical Experience in a Mexican Retail. *International Journal of Advances in Intelligent Informatics*, 10(1). <https://doi.org/10.26555/ijain.v10i1.1112>
- Diwan, T., Anirudh, G., & Tembhurne, J. V. (2023). Object detection using YOLO: challenges, architectural successors, datasets and applications. *Multimedia Tools and Applications*, 82(6). <https://doi.org/10.1007/s11042-022-13644-y>
- Ebrahim, O. A., & Derbew, G. (2023). Application of supervised machine learning algorithms for classification and prediction of type-2 diabetes disease status in Afar regional state, Northeastern Ethiopia 2021. *Scientific Reports*, 13(1). <https://doi.org/10.1038/s41598-023-34906-1>
- Edirisinghe, G. S., & Munson, C. L. (2023). Strategic Rearrangement of Retail Shelf Space Allocations: Using Data Insights to Encourage Impulse Buying.

- Expert Systems with Applications*, 216.
<https://doi.org/10.1016/j.eswa.2022.119442>
- Fodor, K. (2023). Classification of retail loans using decision tree. *Multidiszciplináris Tudományok*, 13(3).
<https://doi.org/10.35925/j.multi.2023.3.21>
- Fröhlich-Wyder, M. T., Bachmann, H. P., & Schmidt, R. S. (2023). Classification of cheese varieties from Switzerland using machine learning methods: Free volatile carboxylic acids. *LWT*, 184.
<https://doi.org/10.1016/j.lwt.2023.115095>
- Fudholi, D. H., Kurniawardhani, A., Andaru, G. I., Alhanafi, A. A., & Najmudin, N. (2024). YOLO-based Small-scaled Model for On-Shelf Availability in Retail. *Jurnal RESTI (Rekayasa Sistem dan Teknologi Informasi)*, 8(2), 265–271. <https://doi.org/10.29207/resti.v8i2.5600>
- Guo, M. H., Xu, T. X., Liu, J. J., Liu, Z. N., Jiang, P. T., Mu, T. J., Zhang, S. H., Martin, R. R., Cheng, M. M., & Hu, S. M. (2022). Attention Mechanisms in Computer Vision: A Survey. Dalam *Computational Visual Media* (Vol. 8, Nomor 3). <https://doi.org/10.1007/s41095-022-0271-y>
- Habibzadeh, F. (2024). Data Distribution: Normal or Abnormal? *Journal of Korean Medical Science*, 39(3). <https://doi.org/10.3346/jkms.2024.39.e35>
- Hadi, R. H., Hady, H. N., Hasan, A. M., Al-Jodah, A., & Humaidi, A. J. (2023). Improved Fault Classification for Predictive Maintenance in Industrial IoT Based on AutoML: A Case Study of Ball-Bearing Faults. *Processes*, 11(5). <https://doi.org/10.3390/pr11051507>
- Hagtvedt, H., & Chandukala, S. R. (2023). Immersive Retailing: The in-Store Experience. *Journal of Retailing*, 99(4).
<https://doi.org/10.1016/j.jretai.2023.10.003>
- Hassan, N. H. M., Ahmad, K., & Salehuddin, H. (2022). Developing and Validating Instrument for Data Integration Governance Framework. *International Journal of Advanced Computer Science and Applications*, 13(2).
<https://doi.org/10.14569/IJACSA.2022.0130219>
- He, L., Zhou, Y., Liu, L., Cao, W., & Ma, J. (2025). Research on object detection and recognition in remote sensing images based on YOLOv11. *Scientific Reports*, 15(1), 14032. <https://doi.org/10.1038/s41598-025-96314-x>
- Hussain, M. (2023). When, Where, and Which?: Navigating the Intersection of Computer Vision and Generative AI for Strategic Business Integration. *IEEE Access*, 11. <https://doi.org/10.1109/ACCESS.2023.3332468>
- Iman, M., Arabnia, H. R., & Rasheed, K. (2023). A Review of Deep Transfer Learning and Recent Advancements. Dalam *Technologies* (Vol. 11, Nomor 2). <https://doi.org/10.3390/technologies11020040>

- Jemai, J., & Zarrad, A. (2023). Feature Selection Engineering for Credit Risk Assessment in Retail Banking. *Information (Switzerland)*, 14(3). <https://doi.org/10.3390/info14030200>
- Jiang, P., Ergu, D., Liu, F., Cai, Y., & Ma, B. (2021). A Review of Yolo Algorithm Developments. *Procedia Computer Science*, 199. <https://doi.org/10.1016/j.procs.2022.01.135>
- Jo, B. J., & Kim, S. K. (2022). Comparative Analysis of OpenPose, PoseNet, and MoveNet Models for Pose Estimation in Mobile Devices. *Traitement du Signal*, 39(1). <https://doi.org/10.18280/ts.390111>
- Jose, J. A. C., Bertumen, C. J. B., Roque, M. T. C., Umali, A. E. B., Villanueva, J. C. T., TanAi, R. J., Sybingco, E., San Juan, J., & Gonzales, E. C. (2024). Smart Shelf System for Customer Behavior Tracking in Supermarkets. *Sensors*, 24(2). <https://doi.org/10.3390/s24020367>
- Kaur, J., & Singh, W. (2022). Tools, Techniques, *Datasets* and Application Areas for Object Detection in an Image: a Review. *Multimedia Tools and Applications*, 81(27). <https://doi.org/10.1007/s11042-022-13153-y>
- Kaushik, P., Rathore, S. P. S., Kaur, P., Kumar, H., & Tyagi, N. (2023). Leveraging Multiscale Adaptive Object Detection and Contrastive Feature Learning for Customer Behavior Analysis in Retail Settings. *International Journal on Recent and Innovation Trends in Computing and Communication*, 11(6 S). <https://doi.org/10.17762/ijritcc.v11i6s.6938>
- Khanam, R., & Hussain, M. (2024). *YOLOv11: An Overview of the Key Architectural Enhancements*. <http://arxiv.org/abs/2410.17725>
- Kim, S., Kim, H. S., & Yoo, J. Il. (2023). Sarcopenia classification model for musculoskeletal patients using smart insole and artificial intelligence gait analysis. *Journal of Cachexia, Sarcopenia and Muscle*, 14(6). <https://doi.org/10.1002/jcsm.13356>
- Krishan, D., & Sigh, A. (2023). Assessing the Best Regression Approach for precipitation analysis with meteorological Data in Lucknow using PyCaret. *International Research Journal of Modernization in Engineering Technology and Science*. <https://doi.org/10.56726/irjmets45024>
- Krishnamoorthy, M., & Karthikeyan, R. (2022). Pattern Mining Algorithms for Data Streams using Itemset. *Measurement: Sensors*, 24. <https://doi.org/10.1016/j.measen.2022.100421>
- Lachhab, W. (2023). *Deep Learning for Efficient Retail Shelf Stock Monitoring and Analysis*. Aalto University.
- Li, X., Grandvalet, Y., Davoine, F., Cheng, J., Cui, Y., Zhang, H., Belongie, S., Tsai, Y. H., & Yang, M. H. (2020). Transfer Learning in Computer Vision Tasks: Remember Where You Come From. *Image and Vision Computing*, 93. <https://doi.org/10.1016/j.imavis.2019.103853>

- Li, X., Guo, Y., Pan, W., Liu, H., & Xu, B. (2023). Human Pose Estimation Based on Lightweight Multi-Scale Coordinate Attention. *Applied Sciences (Switzerland)*, 13(6). <https://doi.org/10.3390/app13063614>
- Mahadevkar, S. V., Khemani, B., Patil, S., Kotecha, K., Vora, D. R., Abraham, A., & Gabralla, L. A. (2022). A Review on Machine Learning Styles in Computer Vision - Techniques and Future Directions. Dalam *IEEE Access* (Vol. 10). <https://doi.org/10.1109/ACCESS.2022.3209825>
- Maji, D., Nagori, S., Mathew, M., & Poddar, D. (2022). YOLO-Pose: Enhancing YOLO for Multi Person Pose Estimation Using Object Keypoint Similarity Loss. *IEEE Computer Society Conference on Computer Vision and Pattern Recognition Workshops*, 2022-June. <https://doi.org/10.1109/CVPRW56347.2022.00297>
- Martínez-García, M., & Hernández-Lemus, E. (2022). Data Integration Challenges for Machine Learning in Precision Medicine. Dalam *Frontiers in Medicine* (Vol. 8). <https://doi.org/10.3389/fmed.2021.784455>
- Mostafa, A. M., Aljasir, M., Alruily, M., Alsayat, A., & Ezz, M. (2023). Innovative Forward Fusion Feature Selection Algorithm for Sentiment Analysis Using Supervised Classification. *Applied Sciences (Switzerland)*, 13(4). <https://doi.org/10.3390/app13042074>
- Naiem, S., Khedr, A. E., Idrees, A. M., & Marie, M. (2023). Iterative Feature Selection-Based DDoS attack Prevention Approach in Cloud. *International Journal of Electrical and Computer Engineering Systems*, 14(2). <https://doi.org/10.32985/IJECES.14.2.9>
- Nguyen, K., Le, M., Martin, B., Cil, I., & Fookes, C. (2022). When AI Meets Store Layout Design: A Review. *Artificial Intelligence Review*, 55(7). <https://doi.org/10.1007/s10462-022-10142-3>
- Ofoegbu, K., & Sajad Esmaeily, A. (2021). A Comparative Analysis of Four Machine Learning Algorithms to Predict Product Sales for a Retail Store. *Dublin Business School*.
- P. S., N., & Aithal, P. S. (2022). Real Time Body Orientation Recognition for Customer Pose Orientation. *International Journal of Management, Technology, and Social Sciences*. <https://doi.org/10.47992/ijmts.2581.6012.0197>
- Padilla, R., Passos, W. L., Dias, T. L. B., Netto, S. L., & Da Silva, E. A. B. (2021). A Comparative Analysis of Object Detection Metrics with a Companion Open-Source Toolkit. *Electronics (Switzerland)*, 10(3). <https://doi.org/10.3390/electronics10030279>
- Pantano, E., Pizzi, G., Bilotta, E., & Pantano, P. (2021). Enhancing Store Layout Decision with Agent-Based Simulations of Consumers' Density. *Expert Systems with Applications*, 182. <https://doi.org/10.1016/j.eswa.2021.115231>
- Poo, Z. Y., Ting, C. Y., Loh, Y. P., & Ghauth, K. I. (2023). Multi-Label Classification with Deep Learning for Retail Recommendation. *Journal of*

- Razif, M. H. M., Ismail, A. P., Abdullah, S. A. C., Shafie, M. A., Isa, I. S., Sulaiman, S. N., & Soh, Z. H. C. (2024). On Edge Crowd Traffic Counting System using Deep Learning on Jetson Nano for Smart Retail Environment. *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 42(1), 1–13. <https://doi.org/10.37934/araset.42.1.113>
- Sampath, V., Maurtua, I., Aguilar Martín, J. J., & Gutierrez, A. (2021). A Survey on Generative Adversarial Networks for Imbalance Problems in Computer Vision Tasks. *Journal of Big Data*, 8(1). <https://doi.org/10.1186/s40537-021-00414-0>
- Schröer, C., Kruse, F., & Gómez, J. M. (2021). A Systematic Literature Review on Applying CRISP-DM Process Model. *Procedia Computer Science*, 181. <https://doi.org/10.1016/j.procs.2021.01.199>
- Senarath, S., Pathirana, P., Meedeniya, D., & Jayarathna, S. (2022). Customer Gaze Estimation in Retail Using Deep Learning. *IEEE Access*, 10. <https://doi.org/10.1109/ACCESS.2022.3183357>
- Siji George, C. G., & Sumathi, B. (2020). Grid search tuning of hyperparameters in random forest classifier for customer feedback sentiment prediction. *International Journal of Advanced Computer Science and Applications*, 11(9). <https://doi.org/10.14569/IJACSA.2020.0110920>
- Silva, B., Moreira, J., & Costa, R. L. de C. (2023). Logical Big Data Integration and Near Real-Time Data Analytics. *Data and Knowledge Engineering*, 146. <https://doi.org/10.1016/j.datak.2023.102185>
- Şimşek, M., & Tekbaş, M. K. (2024). Heatmap Creation with YOLO-Deep SORT System Customized for In-Store Customer Behavior Analysis. *Communications Faculty of Sciences University of Ankara Series A2-A3 Physical Sciences and Engineering*, 66(1). <https://doi.org/10.33769/aupse.1378578>
- Singh, M., Patidar, V., Ayyub, S., Soni, A., Vyas, M., Sharma, D., & Ranadive, A. (2023). An Analytical Survey of Difficulty Faced in an Online Lecture During COVID-19 Pandemic Using CRISP-DM. *Journal of Computer Science*, 19(2). <https://doi.org/10.3844/jcssp.2023.242.250>
- Taye, M. M. (2023). Theoretical Understanding of Convolutional Neural Network: Concepts, Architectures, Applications, Future Directions. Dalam *Computation* (Vol. 11, Nomor 3). <https://doi.org/10.3390/computation11030052>
- Terven, J., Córdova-Esparza, D. M., & Romero-González, J. A. (2023). A Comprehensive Review of YOLO Architectures in Computer Vision: From YOLOv1 to YOLOv8 and YOLO-NAS. Dalam *Machine Learning and Knowledge Extraction* (Vol. 5, Nomor 4). <https://doi.org/10.3390/make5040083>

- Tlapana, T. (2021). The Impact of Store Layout on Consumer Buying Behavior: A Case of Convenience Stores from a Selected Township in Kwazulu Natal. *International Review of Management and Marketing*, 11(5). <https://doi.org/10.32479/irmm.11583>
- Tran, N., Nguyen, M., Le, T., Huynh, T., Nguyen, T., & Nguyen, T. (2023). Exploring the potential of skeleton and machine learning in classroom cheating detection. *Indonesian Journal of Electrical Engineering and Computer Science*, 32(3). <https://doi.org/10.11591/IJEECS.V32.I3.PP1533-1544>
- Vaidyanathan, N., & Henningsson, S. (2023). Designing Augmented Reality Services for Enhanced Customer Experiences in Retail. *Journal of Service Management*, 34(1). <https://doi.org/10.1108/JOSM-01-2022-0004>
- Wan, C., Pang, Y., & Lan, S. (2022). Overview of YOLO Object Detection Algorithm. *International Journal of Computing and Information Technology*, 2(1). <https://doi.org/10.56028/ijcit.1.2.11>
- Wang, M. (2020). Consumer Behavior Analysis in the Offline Retail Stores based on convolutional neural network. *Journal of Physics: Conference Series*, 1544(1). <https://doi.org/10.1088/1742-6596/1544/1/012162>
- Wang, X., Zhai, M., Ren, Z., Ren, H., Li, M., Quan, D., Chen, L., & Qiu, L. (2021). Exploratory study on classification of diabetes mellitus through a combined Random Forest Classifier. *BMC Medical Informatics and Decision Making*, 21(1). <https://doi.org/10.1186/s12911-021-01471-4>
- Wen, J., Abe, T., & Suganuma, T. (2022). A Customer Behavior Recognition Method for Flexibly Adapting to Target Changes in Retail Stores. *Sensors*, 22(18). <https://doi.org/10.3390/s22186740>
- Wen, J., Guillen, L., Abe, T., & Suganuma, T. (2021). A hierarchy-based system for recognizing customer activity in retail environments. *Sensors*, 21(14). <https://doi.org/10.3390/s21144712>
- Wieland, T. (2023). A Micro-Econometric Store Choice Model Incorporating Multi- and Omni-Channel Shopping: The Case of Furniture Retailing in Germany. *Geographical Analysis*, 55(1). <https://doi.org/10.1111/gean.12308>
- Wu, C. H., Wu, T. C., & Lin, W. Bin. (2023). Exploration of Applying Pose Estimation Techniques in Table Tennis. *Applied Sciences (Switzerland)*, 13(3). <https://doi.org/10.3390/app13031896>
- Zar, J. H. (2005). Spearman Rank Correlation. Dalam *Encyclopedia of Biostatistics*. <https://doi.org/10.1002/0470011815.b2a15150>
- Zheng, C., Wu, W., Chen, C., Yang, T., Zhu, S., Shen, J., Kehtarnavaz, N., & Shah, M. (2023). Deep Learning-based Human Pose Estimation: A Survey. *ACM Computing Surveys*, 56(1). <https://doi.org/10.1145/3603618>