

DAFTAR PUSTAKA

- Adedeji, O. and Wang, Z. (2019) ‘Intelligent waste classification system using deep learning convolutional neural network’, *Procedia Manufacturing*, 35, pp. 607–612. doi: 10.1016/j.promfg.2019.05.086.
- Akter, T. *et al.* (2021) ‘Improved transfer-learning-based facial recognition framework to detect autistic children at an early stage’, *Brain Sciences*, 11(6). doi: 10.3390/brainsci11060734.
- Anaconda Inc. (2021) *Anaconda | The World’s Most Popular Data Science Platform, Anaconda*. Available at: <https://www.anaconda.com/> (Accessed: 1 July 2023).
- Areni, I. S. *et al.* (2023) ‘Increasing Precision of Water Sprout Detection based on Mask R-CNN with Data Augmentation’, *International Journal on Advanced Science, Engineering and Information Technology*, 13(2), pp. 794–800. doi: 10.18517/ijaseit.13.2.16468.
- Bhatti, H. M. A. *et al.* (2020) ‘Multi-detection and Segmentation of Breast Lesions Based on Mask RCNN-FPN’, *Proceedings - 2020 IEEE International Conference on Bioinformatics and Biomedicine, BIBM 2020*, pp. 2698–2704. doi: 10.1109/BIBM49941.2020.9313170.
- Channiwala, S. A. and Parikh, P. P. (2002) ‘A unified correlation for estimating HHV of solid, liquid and gaseous fuels’, *Fuel*, 81(8), pp. 1051–1063. doi: 10.1016/S0016-2361(01)00131-4.
- Chen, J. *et al.* (2021) ‘Quantification of water inflow in rock tunnel faces via convolutional neural network approach’, *Automation in Construction*, 123(March). doi: 10.1016/j.autcon.2020.103526.
- Dabholkar, A. *et al.* (2017) ‘Smart illegal dumping detection’, *Proceedings - 3rd IEEE International Conference on Big Data Computing Service and Applications, BigDataService 2017*, pp. 255–260. doi: 10.1109/BigDataService.2017.51.
- Divyanth, L. G. *et al.* (2022) ‘Detection of Coconut Clusters Based on Occlusion Condition Using Attention-Guided Faster R-CNN for Robotic Harvesting’, *Foods*, 11(23). doi: 10.3390/foods11233903.
- Eka Putri, R. and Andasuryani, A. (2017) ‘Studi Mutu Briket Arang Dengan Bahan Baku Limbah Biomassa’, *Jurnal Teknologi Pertanian Andalas*, 21(2), p. 143. doi: 10.25077/jtpa.21.2.143-151.2017.
- Elgendy, M. (2020) *Deep Learning for Vision Systems, Manning Publications Co.*
- Follmann, P. *et al.* (2019) ‘Learning to see the invisible: End-to-end trainable amodal instance segmentation’, *Proceedings - 2019 IEEE Winter Conference on Applications of Computer Vision, WACV 2019*, pp. 1328–1336. doi: 10.1109/WACV.2019.00146.

Haryati, T. and Amir, I. (2021) 'Identifikasi Karakteristik Briket Arang Kelapa Yang Diminati Pasar Arab Saudi Dan Prosedur Ekspornya', *Ilmiah Ekonomi Dan Bisnis*, 11(1), pp. 39–45. Available at: [file:///C:/Users/ASUS/Downloads/1401-Article Text-3405-1-10-20210916.pdf](file:///C:/Users/ASUS/Downloads/1401-Article%20Text-3405-1-10-20210916.pdf).

He, K. *et al.* (2016) 'Deep residual learning for image recognition', *Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, 2016-Decem, pp. 770–778. doi: 10.1109/CVPR.2016.90.

He, K. *et al.* (2017) 'Mask R-CNN', *Proceedings of the IEEE International Conference on Computer Vision*, 2017-Octob, pp. 2980–2988. doi: 10.1109/ICCV.2017.322.

Hidayatullah, P. (2021) *Buku Sakti Deep Learning*. Cimahi: Stunning Vision AI.

Howard, A. G. *et al.* (2017) 'MobileNets: Efficient Convolutional Neural Networks for Mobile Vision Applications'. Available at: <http://arxiv.org/abs/1704.04861>.

Ibrahim Andi, Alang Asrul Haq, Madi, Baharuddin, Ahmad Muhammad Aswar, D. (2018) 'Metodologi Penelitian', *Metodologi Penelitian*, 1(1), pp. 102–104. Available at: <http://dx.doi.org/10.1016/j.cirp.2016.06.001> <http://dx.doi.org/10.1016/j.powtec.2016.12.055> <https://doi.org/10.1016/j.ijfatigue.2019.02.006> <https://doi.org/10.1016/j.matlet.2019.04.024> <https://doi.org/10.1016/j.matlet.2019.127252> <http://dx.doi.org/10.1016/j.matlet.2019.127252>

Jaikumar, P., Vandaele, R. and Ojha, V. (2021) 'Transfer Learning for Instance Segmentation of Waste Bottles Using Mask R-CNN Algorithm', pp. 140–149. doi: 10.1007/978-3-030-71187-0_13.

Kabir Ahmad, R. *et al.* (2022) 'Exploring the potential of coconut shell biomass for charcoal production', *Ain Shams Engineering Journal*, 13(1), p. 101499. doi: 10.1016/j.asej.2021.05.013.

Kang, D.-Y., Duong, H. P. and Park, J.-C. (2020) 'Application of Deep Learning in Dentistry and Implantology', *The Korean Academy of Oral and Maxillofacial Implantology*, 24(3), pp. 148–181. doi: 10.32542/implantology.202015.

Kapach, K. *et al.* (2012) 'Computer vision for fruit harvesting robots - State of the art and challenges ahead', *International Journal of Computational Vision and Robotics*, 3(1–2), pp. 4–34. doi: 10.1504/IJCVR.2012.046419.

Kedutaan Besar Republik Indonesia (2021) *Arang Batok Kelapa Indonesia yang Kualitasnya Mendunia*, <https://kemlu.go.id/maputo/id/news/13455/arang-batok-kelapa-indonesia-yang-kualitasnya-mendunia>. Available at: <https://kemlu.go.id/maputo/id/news/13455/arang-batok-kelapa-indonesia-yang-kualitasnya-mendunia> (Accessed: 15 June 2023).

Khan, I. *et al.* (2021) 'Analyzing Renewable and Nonrenewable Energy Sources for Environmental Quality: Dynamic Investigation in Developing Countries', *Mathematical Problems in Engineering*, 2021. doi: 10.1155/2021/3399049.

- Li, K. and Malik, J. (2016) ‘Amodal Instance Segmentation’, *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 9906 LNCS, pp. 677–693. doi: 10.1007/978-3-319-46475-6_42.
- Li, S., Yan, M. and Xu, J. (2020) ‘Garbage object recognition and classification based on Mask Scoring RCNN’, *Proceedings - 2020 International Conference on Culture-Oriented Science and Technology, ICCST 2020*, pp. 54–58. doi: 10.1109/ICCST50977.2020.00016.
- Liu, X. *et al.* (2019) ‘Cucumber fruits detection in greenhouses based on instance segmentation’, *IEEE Access*, 7, pp. 139635–139642. doi: 10.1109/ACCESS.2019.2942144.
- Machefer, M. *et al.* (2020) ‘Mask R-CNN refitting strategy for plant counting and sizing in uav imagery’, *Remote Sensing*, 12(18), pp. 1–23. doi: 10.3390/RS12183015.
- Mahmood, A. *et al.* (2020) ‘Automatic hierarchical classification of kelps using deep residual features’, *Sensors (Switzerland)*, 20(2), pp. 1–20. doi: 10.3390/s20020447.
- Malhotra, P. *et al.* (2022) ‘Deep Learning-Based Computer-Aided Pneumothorax Detection Using Chest X-ray Images’, *Sensors*, 22(6). doi: 10.3390/s22062278.
- Moshkov, N. *et al.* (2020) ‘Test-time augmentation for deep learning-based cell segmentation on microscopy images’, *Scientific Reports*, 10(1), pp. 1–7. doi: 10.1038/s41598-020-61808-3.
- Muammar, D. *et al.* (2020) ‘Garbage Image Segmentation Using Combination of Thresholding Algorithms and Pyramid Scene Parsing Network’, *ICICoS 2020 - Proceeding: 4th International Conference on Informatics and Computational Sciences*, pp. 0–5. doi: 10.1109/ICICoS51170.2020.9299095.
- Nawaz, H. (no date) ‘Deploy Machine Learning Model and Integrate it in a Web Application’. Available at: <https://blog.devgenius.io/deploy-machine-learning-model-as-a-rest-api-in-a-web-application-e802b9785db6> (Accessed: 3 June 2023).
- Noorani, S. and Fernandes, M. (2018) ‘Evaluation of convolutional neural networks for waste identification’, *Proceedings of the International Conference on Computing Methodologies and Communication, ICCMC 2017, 2018-Janua(Iccmc)*, pp. 204–207. doi: 10.1109/ICCMC.2017.8282675.
- Nugroho, Y. (2010) ‘Analisis Setting Parameter Yang Optimum Untuk Mendapatkan Jumlah Cacat Minimum Pada Kualitas Briket Arang Tempurung Kelapa’.
- Nuha, M. S. and Alexandro H., R. (2022) ‘Pemanfaatan Yolo untuk Pengenalan Kesegaran Buah Mangga’, *Joutica*, 7(1), p. 513. doi: 10.30736/jti.v7i1.747.
- Op het Veld, R. M. G. *et al.* (2015) ‘Detection and handling of occlusion in an

object detection system’, *Video Surveillance and Transportation Imaging Applications 2015*, 9407, p. 94070N. doi: 10.1117/12.2077175.

Pangestu, M. A. and Bunyamin, H. (2018) ‘Analisis Performa dan Pengembangan Sistem Deteksi Ras Anjing pada Gambar dengan Menggunakan Pre-Trained CNN Model’, *Jurnal Teknik Informatika dan Sistem Informasi*, 4, pp. 337–344.

Priyanto Hidayatullah (2021) *Buku Sakti Deep Learning*. Stunning Vision AI Academy.

Qi, L. *et al.* (2019) ‘Amodal instance segmentation with kins dataset’, *Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, 2019-June, pp. 3009–3018. doi: 10.1109/CVPR.2019.00313.

Rahman, M. F. and Bambang, B. (2021) ‘Deteksi Sampah pada Real-time Video Menggunakan Metode Faster R-CNN’, *Applied Technology and Computing Science Journal*, 3(2), pp. 117–125. doi: 10.33086/atcsj.v3i2.1846.

Randles, B. M. *et al.* (2017) ‘Using the Jupyter Notebook as a Tool for Open Science: An Empirical Study’, *Proceedings of the ACM/IEEE Joint Conference on Digital Libraries*. doi: 10.1109/JCDL.2017.7991618.

Roslan, N. A. M. *et al.* (2023) ‘Automatic plant recognition using convolutional neural network on Malaysian medicinal herbs: the value of data augmentation’, *International Journal of Advances in Intelligent Informatics*, 9(1), pp. 136–147. doi: 10.26555/ijain.v9i1.1076.

Seema Singh (2018) *Cousins of Artificial Intelligence | by Seema Singh | Towards Data Science*. Available at: <https://towardsdatascience.com/cousins-of-artificial-intelligence-dda4edc27b55> (Accessed: 18 June 2023).

Shelhamer, E., Long, J. and Darrell, T. (2017) ‘Fully Convolutional Networks for Semantic Segmentation’, *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 39(4), pp. 640–651. doi: 10.1109/TPAMI.2016.2572683.

Styorini, W. *et al.* (2022) ‘Jurnal Politeknik Caltex Riau Penerapan Deep Learning Pada Jenis Penyakit Tanaman Kelapa Sawit Menggunakan Algoritma Convolutional Neural Network’, *Jurnal Komputer Terapan*, 8(2), pp. 359–367. Available at: <https://jurnal.pcr.ac.id/index.php/jkt/>.

Suryaningsih, S. *et al.* (2017) ‘Combustion quality analysis of briquettes from variety of agricultural waste as source of alternative fuels’, *IOP Conference Series: Earth and Environmental Science*, 65(1). doi: 10.1088/1755-1315/65/1/012012.

Triadi, A. A. A. *et al.* (2022) ‘Penerapan Teknologi Briket pada Pengusaha Arang Tempurung Kelapa Tradisional’, 4(1), pp. 53–58.

Trianti, C. A., Kristianto, B. and Hendry (2021) ‘Integration of Flask and Python on the Face Recognition Based Attendance System’, *2021 2nd International Conference on Innovative and Creative Information Technology, ICITech 2021*, pp. 164–168. doi: 10.1109/ICITech50181.2021.9590122.

- Uzun, H. *et al.* (2017) 'Improved prediction of higher heating value of biomass using an artificial neural network model based on proximate analysis', *Bioresource Technology*, 234, pp. 122–130. doi: 10.1016/j.biortech.2017.03.015.
- Vinet, L. and Zhedanov, A. (2011) *A 'missing' family of classical orthogonal polynomials*, *Journal of Physics A: Mathematical and Theoretical*. doi: 10.1088/1751-8113/44/8/085201.
- Vision, C. (2020) 'Pengenalan Sampah Plastik Dengan Model', (Ciastech), pp. 691–698.
- Wang, A. *et al.* (2020) 'Robust object detection under occlusion with context-aware compositionalnets', *Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, pp. 12642–12651. doi: 10.1109/CVPR42600.2020.01266.
- Wang, D. and He, D. (2022) 'Fusion of Mask RCNN and attention mechanism for instance segmentation of apples under complex background', *Computers and Electronics in Agriculture*, 196(March), p. 106864. doi: 10.1016/j.compag.2022.106864.
- Wang, J. *et al.* (2018) 'Bottle Detection in the Wild Using Low-Altitude Unmanned Aerial Vehicles', *2018 21st International Conference on Information Fusion, FUSION 2018*, 2, pp. 439–444. doi: 10.23919/ICIF.2018.8455565.
- Wang, T. *et al.* (2022) 'Tea picking point detection and location based on Mask-RCNN', *Information Processing in Agriculture*, (xxxx). doi: 10.1016/j.inpa.2021.12.004.
- Wardani, Y. R. *et al.* (2020) 'Penggunaan Arang Aktif Berbahan Dasar Limbah Biomassa Pada Proses Filtrasi Air Groundtank Ditinjau dari Uji TDS, Uji Kejernihan dan Uji Fe', *Jurnal Teori dan Aplikasi Fisika*, 8(2), pp. 195–202. doi: 10.23960/jtaf.v8i2.2590.
- Wicaksono, A., Purnomo, M. H. and Yuniarno, E. M. (2021) 'Deteksi Pejalan Kaki pada Zebra Cross untuk Peringatan Dini Pengendara Mobil Menggunakan Mask R-CNN', *Jurnal Teknik ITS*, 10(2). doi: 10.12962/j23373539.v10i2.80219.
- Widodo, A. A. (2016) 'Pengaruh Tekanan Terhadap Karakteristik Briket Bioarang Dari Sampah Kebun Campuran Dan Kulit Kacang Tanah Dengan Tambahan Minyak Jelantah', *Skripsi*, (Jurusan Teknik Lingkungan, Universitas Islam Indonesia, Sleman), pp. 5–16. Available at: <https://dspace.uui.ac.id/handle/123456789/2461>.
- Yang, Z. *et al.* (2020) 'Instance segmentation method based on improved mask R-cnn for the stacked electronic components', *Electronics (Switzerland)*, 9(6). doi: 10.3390/electronics9060886.
- Youme, O. *et al.* (2021) 'Deep Learning and Remote Sensing: Detection of Dumping Waste Using UAV', *Procedia Computer Science*, 185(June), pp. 361–369. doi: 10.1016/j.procs.2021.05.037.

Zhang, Q., Zhang, X., *et al.* (2021) 'Recyclable waste image recognition based on deep learning', *Resources, Conservation and Recycling*, 171(April), p. 105636. doi: 10.1016/j.resconrec.2021.105636.

Zhang, Q., Yang, Q., *et al.* (2021a) 'Waste image classification based on transfer learning and convolutional neural network', *Waste Management*, 135(September), pp. 150–157. doi: 10.1016/j.wasman.2021.08.038.

Zhang, Q., Yang, Q., *et al.* (2021b) 'Waste image classification based on transfer learning and convolutional neural network', *Waste Management*, 135(May), pp. 150–157. doi: 10.1016/j.wasman.2021.08.038.

Zhao, C., Lee, W. S. and He, D. (2016) 'Immature green citrus detection based on colour feature and sum of absolute transformed difference (SATD) using colour images in the citrus grove', *Computers and Electronics in Agriculture*, 124, pp. 243–253. doi: 10.1016/j.compag.2016.04.009.

Zhu, Y. *et al.* (2017) 'Semantic amodal segmentation', *Proceedings - 30th IEEE Conference on Computer Vision and Pattern Recognition, CVPR 2017*, 2017-Janua, pp. 3001–3009. doi: 10.1109/CVPR.2017.320.

LAMPIRAN

Lampiran 1. Pengambilan Data





Lampiran 2. Pengujian Aplikasi





Lampiran 3. Source Code Program

Source code dalam penelitian ini dapat di unduh pada link berikut :
<https://github.com/anzanulzikra/Tempurung-Kelapa-Mask-R-CNN/>