

DAFTAR PUSTAKA

- Adarsh, P., Rathi, P., & Kumar, M. (2020). YOLO v3-Tiny: Object Detection and Recognition using one stage improved model. *2020 6th International Conference on Advanced Computing and Communication Systems (ICACCS)*, 687-694. <https://doi.org/10.1109/ICACCS48705.2020.9074315>.
- Alzubaidi, L., Zhang, J., Humaidi, A. J., Al-Dujaili, A., Duan, Y., Al-Shamma, O., ... & Farhan, L. (2021). Review of deep learning: Concepts, CNN architectures, challenges, applications, future directions. *Journal of Big Data*, 8, 1-74.
- Ashraf, A., Sophian, A., Shafie, A. A., Gunawan, T. S., Ismail, N. N., & Bawono, A. A. (2022). Detection of road cracks using convolutional neural networks and threshold segmentation. *Journal of Integrated and Advanced Engineering (JIAE)*, 2(2), 123-134.
- Asad, M. H., Khaliq, S., Yousaf, M. H., Ullah, M. O., & Ahmad, A. (2022). Pothole detection using deep learning: A real-time and AI-on-the-edge perspective. *Advances in Civil Engineering*, 2022(1), Article 9221211.
- Aslam, A., Irtaza, A., & Nida, N. (2020). Object detection and localization in natural scenes through single-step and two-step models. *2020 International Conference on Emerging Trends in Smart Technologies (ICETST)*, 1-7. <https://doi.org/10.1109/ICETST49965.2020.9080728>
- Chen, S., Kuhn, M., Prettnner, K., & Bloom, D. E. (2019). The global macroeconomic burden of road injuries: Estimates and projections for 166 countries. *The Lancet Planetary Health*, 3(9), e390-e398.
- Chu, Y., Xiang, X., Wang, Y., & Huang, B. (2022). Pavement disease detection through improved YOLOv5s neural network. *Computational Intelligence and Neuroscience*, 2022, Article 9221211.
- Doshi, K., & Yilmaz, Y. (2020). Road damage detection using deep ensemble learning. In *2020 IEEE International Conference on Big Data (Big Data)* (pp. 5540-5544). IEEE.
- Feng, X., Xiao, L., Li, W., Pei, L., Sun, Z., Ma, Z., ... & Ju, H. (2020). Pavement crack detection and segmentation method based on improved deep learning fusion model. *Mathematical Problems in Engineering*, 2020, 1-22.
- Hascoet, T., Zhang, Y., Persch, A., Takashima, R., Takiguchi, T., & Ariki, Y. (2020, December). Fasterrcnn monitoring of road damages: Competition and deployment. In *2020 IEEE International Conference on Big Data (Big Data)* (pp. 5545-5552). IEEE.
- Hassaballah, M., & Hosny, K. M. (Eds.). (2019). *Recent advances in computer vision*. Springer. <https://doi.org/10.1007/978-3-030-03000-1>
- Hou, Y., Dong, Y., Zhang, Y., Zhou, Z., Tong, X., Wu, Q., ... & Li, R. (2022). The application of a pavement distress detection method based on FS-Net. *Sustainability*, 14(5), Article 2715.

- Janiesch, C., Zschech, P., & Heinrich, K. (2021). Machine learning and deep learning. *Electronic Markets*, 31(3), 685-695.
- Jani, M., Fayyad, J., Al-Younes, Y., & Najjaran, H. (2023). Model compression methods for YOLOv5: A review. *arXiv preprint arXiv:2307.11904*.
- Jocher, G., Chaurasia, A., & Qiu, J. (2023). *Ultralytics YOLOv8* (Version 8.0.0) [Computer software]. <https://github.com/ultralytics/ultralytics>
- Kristanto, E. B., Andrayana, S., & Benramhman, B. (2020). Application of Waterfall SDLC method in designing student's web blog information system at the National University. *Jurnal Mantik*, 4(1), 472-482.
- Li, Z., Xiao, X., Xie, J., Fan, Y., Wang, W., Chen, G., ... & Wang, T. (2024). Cycle-YOLO: A Efficient and Robust Framework for Pavement Damage Detection. *arXiv preprint arXiv:2405.17905*.
- Liang, H., Lee, S. C., & Seo, S. (2022). Automatic recognition of road damage based on lightweight attentional convolutional neural network. *Sensors*, 22(24), 9599.
- Louis Armando Tarigan, Tulus Marco Diaztro, Widya Herliana Dewi Rambe, Winku Alvha Aripaga, & Syuratty Astuti Rahayu Manalu. (2023). Analisis Dampak Dari Kerusakan pada Jalan Perhubungan, Tembung, Kecamatan Percut Sei Tuan Kabupaten Deli Serdang. *Jurnal Arjuna: Publikasi Ilmu Pendidikan, Bahasa Dan Matematika*, 2(1), 142–149. <https://doi.org/10.61132/arjuna.v2i1.473>
- Manurung, E. H., Sawito, K., Satoto, A., & Tuanany, N. (2022). Analysis of the causes of road damage. *Civilla J. Tek. Sipil Univ. Islam Lamongan*, 7(1), 87.
- Maullana, A. P., & Indrastuti, I. (2023). Analysis Of The Level Of Road Damage Using The Pavement Condition Index (PCI) Method: A Case Of Jalan Laswi Majalengka. *LEADER: Civil Engineering and Architecture Journal*, 1(4), 482-488.
- Nguyen, D., Nguyen, T., Kim, H., & Lee, H. (2019). A high-throughput and power-efficient FPGA implementation of YOLO CNN for object detection. *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 27, 1861-1873. <https://doi.org/10.1109/TVLSI.2019.2905242>
- Rehana, K. C., & Remya, G. (2022). Road damage detection and classification using YOLOv5. *2022 Third International Conference on Intelligent Computing, Instrumentation and Control Technologies (ICICICT)*. <https://doi.org/10.1109/ICICICT54557.2022.9917763>
- Shamila Ebenezer, A., Deepa Kanmani, S., Sheela, V., Ramalakshmi, K., Chandran, V., Sumithra, M. G., ... & Murugesan, B. (2021). Identification of civil infrastructure damage using ensemble transfer learning model. *Advances in Civil Engineering*, 2021(1), Article 5589688.
- Silva, L. A., Leithardt, V. R. Q., Batista, V. F. L., González, G. V., & Santana, J. F. D. P. (2023). Automated road damage detection using UAV images and deep learning

- techniques. *IEEE Access*, 11, 62918-62931.
- Song, L., & Wang, X. (2021). Faster region convolutional neural network for automated pavement distress detection. *Road Materials and Pavement Design*, 22(1), 23-41.
- Sun, F. (2023). Face recognition analysis based on the YOLO algorithm. *Applied and Computational Engineering*. <https://doi.org/10.54254/2755-2721/2/20220679>
- Sun, Z., Zhu, L., Qin, S., Yu, Y., Ju, R., & Li, Q. (2024). Road surface defect detection algorithm based on YOLOv8. *Electronics*, 13(12), 2413.
- Tang, Z., Chamchong, R., & Pawara, P. (2023, July 9-11). A comparison of road damage detection based on YOLOv8. *Proceedings of the 2023 International Conference on Machine Learning and Cybernetics*. Mahasarakham University, Thailand. <https://doi.org/10.1109/ICMLC58545.2023.10327993>
- Terven, J., & Cordova-Esparza, D. (2023). A comprehensive review of YOLO: From YOLOv1 to YOLOv8 and beyond. *arXiv preprint arXiv:2304.00501*.
- Ultralytics. (2024). *YOLOv9: Learning what you want to learn using programmable gradient information*. <https://docs.ultralytics.com/models/yolov9/>
- Wang, C.-Y., Yeh, I.-H., & Liao, H.-Y. M. (2024). YOLOv9: Learning what you want to learn using programmable gradient information. Institute of Information Science, Academia Sinica; National Taipei University of Technology; Chung Yuan Christian University. <https://docs.ultralytics.com/models/yolov9/>
- Wang, Q., & Guo, G. (2019). LS-CNN: Characterizing local patches at multiple scales for face recognition. *IEEE Transactions on Information Forensics and Security*, 15, 1640-1653.
- Yamashita, R., Nishio, M., Do, R. K. G., & Togashi, K. (2018). Convolutional neural networks: An overview and application in radiology. *Insights into Imaging*, 9, 611-629.
- Yang, Z., Li, L., & Luo, W. (2022). PDNet: Improved YOLOv5 nondeformable disease detection network for asphalt pavement. *Computational Intelligence and Neuroscience*, 2022, Article 9221211.
- Zhang, L., Wan, F., Lei, G., & Xu, L. (2023, November). A Road Damage Detection Method Based on Improved YOLOV8s. In *2023 5th International Conference on Frontiers Technology of Information and Computer (ICFTIC)* (pp. 1112-1116). IEEE.
- Zhou, X., Li, Y., & Liang, W. (2020). CNN-RNN based intelligent recommendation for online medical pre-diagnosis support. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 18(3), 912-921.
- Zou, Z., Chen, K., Shi, Z., Guo, Y., & Ye, J. (2023). Object detection in 20 years: A survey. *Proceedings of the IEEE*, 111(3), 257-276.