

REFERENCES

- [1] S. Huang, Y. Jiang, and Y. Jiang, "Design of Target Detection and Tracking System for Sports Video," *IEEE Access*, pp. 1–1, Jul. 2020, doi: 10.1109/ACCESS.2020.3011204.
- [2] Y. Li, "Research on Sports Video Image Analysis Based on the Fuzzy Clustering Algorithm," *Wirel Commun Mob Comput*, vol. 2021, 2021, doi: 10.1155/2021/6630130.
- [3] R. Valldecabres, C. A. Casal, J. G. C. Chiminazzo, and A. M. de Benito, "Players' On-Court Movements and Contextual Variables in Badminton World Championship," *Front Psychol*, vol. 11, p. 1567, Jul. 2020, doi: 10.3389/FPSYG.2020.01567/BIBTEX.
- [4] A. Nady and E. E. Hemayed, "Player identification in different sports," *VISIGRAPP 2021 - Proceedings of the 16th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications*, vol. 5, pp. 653–660, 2021, doi: 10.5220/0010341706530660.
- [5] M. Hribernik, E. Keš, A. Umek, and A. Kos, "Sensor Based Agility Assessment in Sport," *Procedia Comput Sci*, vol. 187, pp. 440–446, Jan. 2021, doi: 10.1016/J.PROCS.2021.04.082.
- [6] M. Wu *et al.*, "Invisible experience to real-time assessment in elite tennis athlete training: Sport-specific movement classification based on wearable MEMS sensor data," *Proc Inst Mech Eng P J Sport Eng Technol*, Oct. 2021, doi: 10.1177/17543371211050312/ASSET/IMAGES/LARGE/10.1177_17543371211050312-FIG9.JPEG.
- [7] W. H. Chen, C. W. Chiang, N. J. Fiolo, P. X. Fuchs, and T. Y. Shiang, "Ideal Combinations of Acceleration-Based Intensity Metrics and Sensor Positions to Monitor Exercise Intensity under Different Types of Sports," *Sensors (Basel)*, vol. 22, no. 7, Apr. 2022, doi: 10.3390/S22072583.
- [8] F. R. Siregar and W. F. al Maki, "Hybrid Method for Flower Classification in High Intra-class Variation," *2020 3rd International Seminar on Research of Information Technology and Intelligent Systems, ISRITI 2020*, pp. 73–78, Dec. 2020, doi: 10.1109/ISRITI51436.2020.9315379.
- [9] A. Farhanah and W. F. al Maki, "Hops Plants Disease Detection using Feature Selection based BPSO-SVM," *International Conference on Electrical Engineering, Computer Science and Informatics (EECSI)*, vol. 2022-October, pp. 389–393, 2022, doi: 10.23919/EECSI56542.2022.9946620.
- [10] Y. Ferdinand and W. F. al Maki, "Broccoli leaf diseases classification using support vector machine with particle swarm optimization based on feature selection," *International Journal of Advances in Intelligent Informatics*, vol. 8, no. 3, pp. 337–348, Nov. 2022, doi: 10.26555/ijain.v8i3.951.
- [11] K. Rangasamy, M. A. As'ari, N. A. Rahmad, N. F. Ghazali, and S. Ismail, "Deep learning in sport video analysis: a review," *TELKOMNIKA Telecommunication Computing Electronics and Control*, vol. 18, no. 4, pp. 1926–1933, 2020, doi: 10.12928/TELKOMNIKA.V18I4.14730.

- [12] M. Buric, M. Ivacic-Kos, and M. Pobar, "Player tracking in sports videos," *Proceedings of the International Conference on Cloud Computing Technology and Science, CloudCom*, vol. 2019-December, pp. 334–340, Dec. 2019, doi: 10.1109/CLOUDCOM.2019.00058.
- [13] Z. Q. Zhao, P. Zheng, S. T. Xu, and X. Wu, "Object Detection With Deep Learning: A Review," *IEEE Trans Neural Netw Learn Syst*, vol. 30, no. 11, pp. 3212–3232, Nov. 2018, doi: 10.1109/TNNLS.2018.2876865.
- [14] R. Girshick, J. Donahue, T. Darrell, and J. Malik, "Rich feature hierarchies for accurate object detection and semantic segmentation," *Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, pp. 580–587, Sep. 2014, doi: 10.1109/CVPR.2014.81.
- [15] R. B. Girshick, "Fast R-CNN," *2015 IEEE International Conference on Computer Vision (ICCV)*, pp. 1440–1448, 2015.
- [16] S. Ren, K. He, R. Girshick, and J. Sun, "Faster R-CNN: Towards Real-Time Object Detection with Region Proposal Networks," *IEEE Trans Pattern Anal Mach Intell*, vol. 39, no. 6, pp. 1137–1149, Jun. 2015, doi: 10.48550/arxiv.1506.01497.
- [17] D. M. Hibban and W. F. al Maki, "Classification of Ornamental Betta Fish Using Convolutional Neural Network Method and Grabcut Segmentation," *2021 International Conference on Data Science and Its Applications, ICoDSA 2021*, pp. 102–109, 2021, doi: 10.1109/ICODSA53588.2021.9617213.
- [18] F. A. Chalik and W. F. al Maki, "Classification of Dried Clove Flower Quality using Convolutional Neural Network," *2021 International Conference on Data Science, Artificial Intelligence, and Business Analytics, DATABIA 2021 - Proceedings*, pp. 40–45, 2021, doi: 10.1109/DATABIA53375.2021.9650199.
- [19] F. Liang, Y. Zhou, X. Chen, F.-Z. Liu, C. Zhang, and X. Wu, "Review of Target Detection Technology based on Deep Learning," *Proceedings of the 5th International Conference on Control Engineering and Artificial Intelligence*, 2021.
- [20] "Get Started with the Image Labeler - MATLAB & Simulink - MathWorks Australia." https://au.mathworks.com/help/vision/ug/get-started-with-the-image-labeler.html#mw_9aa17694-d528-4d44-8c85-4baa45860faf (accessed Jan. 11, 2023).
- [21] T. Kamiyama, Y. Kameda, Y. Ohta, and I. Kitahara, "Improvement of Badminton-Player Tracking Applying Image Pixel Compensation," *ITE Transactions on Media Technology and Applications*, vol. 5, no. 2, pp. 36–41, 2017.
- [22] A. Newson, A. Almansa, M. Fradet, Y. Gousseau, and P. Pérez, "Video Inpainting of Complex Scenes," *ArXiv*, vol. abs/1503.05528, 2014.
- [23] Y. Wexler, E. Shechtman, and M. Irani, "Space-time video completion," *Proceedings of the IEEE Computer Society Conference on Computer Vision and Pattern Recognition*, vol. 1, 2004, doi: 10.1109/CVPR.2004.1315022.
- [24] M. Granados, J. Tompkin, K. Kim, O. Grau, J. Kautz, and C. Theobalt, "How Not to Be Seen — Object Removal from Videos of Crowded Scenes," *Computer Graphics Forum*, vol. 31, no. 2, pp. 219–228, 2012, doi: 10.1111/J.1467-8659.2012.03000.X.

- [25] N. A. Rahmad, N. A. J. Sufri, N. H. Muzamil, and M. A. As'ari, "Badminton player detection using faster region convolutional neural network," *Indonesian Journal of Electrical Engineering and Computer Science*, vol. 14, no. 3, pp. 1330–1335, Jun. 2019.
- [26] S. Hurault, C. Ballester, and G. Haro, "Self-Supervised Small Soccer Player Detection and Tracking," *Proceedings of the 3rd International Workshop on Multimedia Content Analysis in Sports*, 2020.
- [27] N. E. Khalifa, M. Loey, and S. Mirjalili, "A comprehensive survey of recent trends in deep learning for digital images augmentation," *Artif Intell Rev*, vol. 55, no. 3, pp. 2351–2377, Mar. 2022, doi: 10.1007/S10462-021-10066-4/TABLES/5.
- [28] M. Bertalmio, G. Sapiro, V. Caselles, and C. Ballester, "Image inpainting," *Proceedings of the ACM SIGGRAPH Conference on Computer Graphics*, pp. 417–424, 2000, doi: 10.1145/344779.344972.
- [29] M. Wang, X. Xu, Q. Yue, and Y. Wang, "A Comprehensive Survey and Experimental Comparison of Graph-Based Approximate Nearest Neighbor Search," *Proceedings of the VLDB Endowment*, vol. 14, no. 11, pp. 1964–1978, Jan. 2021, doi: 10.48550/arxiv.2101.12631.
- [30] J. Du, "Understanding of Object Detection Based on CNN Family and YOLO," *J Phys Conf Ser*, vol. 1004, p. 012029, 2018.
- [31] D. Chahyati, M. I. Fanany, and A. M. Arymurthy, "Tracking People by Detection Using CNN Features," *Procedia Comput Sci*, vol. 124, pp. 167–172, Jan. 2017, doi: 10.1016/J.PROCS.2017.12.143.
- [32] R. Padilla, W. L. Passos, T. L. B. Dias, S. L. Netto, and E. A. B. da Silva, "A Comparative Analysis of Object Detection Metrics with a Companion Open-Source Toolkit," *Electronics 2021, Vol. 10, Page 279*, vol. 10, no. 3, p. 279, Jan. 2021, doi: 10.3390/ELECTRONICS10030279.