

DAFTAR PUSTAKA

- [1] M. Maruyama, S. Singh, K. Inoue, P. P. Roy, M. Iwamura, and M. Yoshioka, “Word-level sign language recognition with multi-stream neural networks focusing on local regions and skeletal information,” vol. 12, pp. 167 333–167 346. [Online]. Available: <http://arxiv.org/abs/2106.15989>
- [2] B. L. Loeding, S. Sarkar, A. Parashar, and A. I. Karshmer, “Progress in automated computer recognition of sign language,” in *Computers Helping People with Special Needs*, K. Miesenberger, J. Klaus, W. L. Zagler, and D. Burger, Eds. Springer Berlin Heidelberg, vol. 3118, pp. 1079–1087, series Title: Lecture Notes in Computer Science. [Online]. Available: http://link.springer.com/10.1007/978-3-540-27817-7_159
- [3] O. Özdemir, M. Baytaş, and L. Akarun, “Multi-cue temporal modeling for skeleton-based sign language recognition,” vol. 17, p. 1148191. [Online]. Available: <https://www.frontiersin.org/articles/10.3389/fnins.2023.1148191/full>
- [4] J. Shin, A. S. M. Miah, K. Suzuki, K. Hirooka, and M. A. M. Hasan, “Dynamic korean sign language recognition using pose estimation based and attention-based neural network,” vol. 11, pp. 143 501–143 513. [Online]. Available: <https://ieeexplore.ieee.org/document/10360810/>
- [5] D. Li, C. R. Opazo, X. Yu, and H. Li, “Word-level deep sign language recognition from video: A new large-scale dataset and methods comparison.” [Online]. Available: <http://arxiv.org/abs/1910.11006>
- [6] H. R. V. Joze and O. Koller, “MS-ASL: A large-scale data set and benchmark for understanding american sign language,” publisher: arXiv Version Number: 2. [Online]. Available: <https://arxiv.org/abs/1812.01053>
- [7] O. Özdemir, A. A. Kındıroğlu, N. C. Camgöz, and L. Akarun, “BosphorusSign22k sign language recognition dataset,” version Number: 2. [Online]. Available: <https://arxiv.org/abs/2004.01283>
- [8] O. M. Sincan and H. Y. Keles, “AUTSL: A large scale multi-modal turkish sign language dataset and baseline methods,” vol. 8, pp. 181 340–181 355. [Online]. Available: <https://ieeexplore.ieee.org/document/9210578/>
- [9] A. Aljabar and S. Suharjito, “BISINDO (bahasa isyarat indonesia) sign language recognition using CNN and LSTM,” vol. 5, no. 5, pp. 282–287. [Online]. Available: <https://astesj.com/v05/i05/p35/>
- [10] T. Handhika, R. I. M. Zen, Murni, D. P. Lestari, and I. Sari, “Gesture recognition for indonesian sign language (BISINDO),” vol. 1028, p. 012173.

- [Online]. Available: <https://iopscience.iop.org/article/10.1088/1742-6596/1028/1/012173>
- [11] I. Jayaweeraage, K. Rajamanthri, A. Kothalawala, N. Gunawardana, A. Induranga, P. Weerakkody, K. Maduwantha, S. Kumara, and K. Koswattage, “Motion capturing in cricket with bare minimum hardware and optimised software: A comparison of MediaPipe and OpenPose,” in *2024 First International Conference on Software, Systems and Information Technology (SSITCON)*. IEEE, pp. 1–8. [Online]. Available: <https://ieeexplore.ieee.org/document/10796169/>
- [12] C. Lugaesi, J. Tang, H. Nash, C. McClanahan, E. Ubweja, M. Hays, F. Zhang, C.-L. Chang, M. G. Yong, J. Lee, W.-T. Chang, W. Hua, M. Georg, and M. Grundmann, “MediaPipe: A framework for building perception pipelines,” version Number: 1. [Online]. Available: <https://arxiv.org/abs/1906.08172>
- [13] Z. Cao, G. Hidalgo, T. Simon, S.-E. Wei, and Y. Sheikh, “OpenPose: Realtime multi-person 2d pose estimation using part affinity fields,” vol. 43, no. 1, pp. 172–186. [Online]. Available: <https://ieeexplore.ieee.org/document/8765346/>
- [14] Pose landmark detection guide. [Online]. Available: https://ai.google.dev/edge/mediapipe/solutions/vision/pose_landmarker
- [15] G. Farnebäck, “Two-frame motion estimation based on polynomial expansion,” in *Image Analysis*, J. Bigun and T. Gustavsson, Eds. Springer Berlin Heidelberg, vol. 2749, pp. 363–370, series Title: Lecture Notes in Computer Science. [Online]. Available: http://link.springer.com/10.1007/3-540-45103-X_50
- [16] J. Sánchez Pérez, E. Meinhardt-Llopis, and G. Facciolo, “TV-l1 optical flow estimation,” vol. 3, pp. 137–150. [Online]. Available: https://www.ipol.im/pub/art/2013/26/?utm_source=doi
- [17] R. Khanam and M. Hussain, “YOLOv11: An overview of the key architectural enhancements,” version Number: 1. [Online]. Available: <https://arxiv.org/abs/2410.17725>
- [18] J. Redmon and A. Farhadi, “YOLOv3: An incremental improvement,” version Number: 1. [Online]. Available: <https://arxiv.org/abs/1804.02767>
- [19] R. Murni, Padlurrahman, and A. Murcayanto, “PERAN VITAL BAHASA ISYARAT INDONESIA DALAM MEMBANGUN KOMUNIKASI DAN INTEGRASI SOSIAL ANAK TULI,” vol. 8, no. 1.
- [20] S. Admin. Mengenal bahasa isyarat di indonesia: SIBI dan BISINDO. [Online]. Available: <https://ditsmp.kemendikdasmen.go.id/ragam-informasi/article/mengenal-bahasa-isyarat-di-indonesia-sibi-dan-bisindo>

- [21] J. Carreira and A. Zisserman, “Quo vadis, action recognition? a new model and the kinetics dataset,” version Number: 3. [Online]. Available: <https://arxiv.org/abs/1705.07750>
- [22] D. Tran, L. Bourdev, R. Fergus, L. Torresani, and M. Paluri, “Learning spatiotemporal features with 3d convolutional networks,” version Number: 4. [Online]. Available: <https://arxiv.org/abs/1412.0767>
- [23] S. Ji, W. Xu, M. Yang, and K. Yu, “3d convolutional neural networks for human action recognition,” vol. 35, no. 1, pp. 221–231, publisher: Institute of Electrical and Electronics Engineers (IEEE). [Online]. Available: <http://ieeexplore.ieee.org/document/6165309/>
- [24] C. Ashwini and V. Sellam, “EOS-3d-DCNN: Ebola optimization search-based 3d-dense convolutional neural network for corn leaf disease prediction,” vol. 35, no. 15, pp. 11 125–11 139. [Online]. Available: <https://link.springer.com/10.1007/s00521-023-08289-3>
- [25] C. Szegedy, W. Liu, Y. Jia, P. Sermanet, S. Reed, D. Anguelov, D. Erhan, V. Vanhoucke, and A. Rabinovich, “Going deeper with convolutions,” version Number: 1. [Online]. Available: <https://arxiv.org/abs/1409.4842>
- [26] M. Lin, Q. Chen, and S. Yan, “Network in network.” [Online]. Available: <http://arxiv.org/abs/1312.4400>
- [27] Y. LeCun, B. Boser, J. S. Denker, D. Henderson, R. E. Howard, W. Hubbard, and L. D. Jackel, “Backpropagation applied to handwritten zip code recognition,” vol. 1, no. 4, pp. 541–551. [Online]. Available: <https://direct.mit.edu/neco/article/1/4/541-551/5515>
- [28] B. K. Horn and B. G. Schunck, “Determining optical flow,” vol. 17, no. 1, pp. 185–203, publisher: Elsevier BV. [Online]. Available: <https://linkinghub.elsevier.com/retrieve/pii/0004370281900242>
- [29] L. I. Rudin, S. Osher, and E. Fatemi, “Nonlinear total variation based noise removal algorithms,” vol. 60, no. 1, pp. 259–268, publisher: Elsevier BV. [Online]. Available: <https://linkinghub.elsevier.com/retrieve/pii/016727899290242F>
- [30] A. Chambolle, “An algorithm for total variation minimization and applications,” vol. 20, no. 1, pp. 89–97, publisher: Springer Science and Business Media LLC. [Online]. Available: <https://link.springer.com/10.1023/B:JMIV.0000011325.36760.1e>
- [31] opticalFlowFarneback. [Online]. Available: <https://www.mathworks.com/help/vision/ref/opticalflowfarneback.html>

- [32] S. Yan, Y. Xiong, and D. Lin, “Spatial temporal graph convolutional networks for skeleton-based action recognition,” version Number: 2. [Online]. Available: <https://arxiv.org/abs/1801.07455>
- [33] M. Niepert, M. Ahmed, and K. Kutzkov, “Learning convolutional neural networks for graphs,” version Number: 4. [Online]. Available: <https://arxiv.org/abs/1605.05273>
- [34] J. Redmon, S. Divvala, R. Girshick, and A. Farhadi, “You only look once: Unified, real-time object detection,” in *2016 IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*. IEEE, pp. 779–788. [Online]. Available: <http://ieeexplore.ieee.org/document/7780460/>
- [35] J. Redmon and A. Farhadi, “YOLO9000: Better, faster, stronger,” version Number: 1. [Online]. Available: <https://arxiv.org/abs/1612.08242>
- [36] A. Bochkovskiy, C.-Y. Wang, and H.-Y. M. Liao, “YOLOv4: Optimal speed and accuracy of object detection,” version Number: 1. [Online]. Available: <https://arxiv.org/abs/2004.10934>
- [37] J. Solawetz. What is YOLOv5? a guide for beginners.
- [38] C. Li, L. Li, H. Jiang, K. Weng, Y. Geng, L. Li, Z. Ke, Q. Li, M. Cheng, W. Nie, Y. Li, B. Zhang, Y. Liang, L. Zhou, X. Xu, X. Chu, X. Wei, and X. Wei, “YOLOv6: A single-stage object detection framework for industrial applications,” version Number: 1. [Online]. Available: <https://arxiv.org/abs/2209.02976>
- [39] C.-Y. Wang, A. Bochkovskiy, and H.-Y. M. Liao, “YOLOv7: Trainable bag-of-freebies sets new state-of-the-art for real-time object detectors,” version Number: 1. [Online]. Available: <https://arxiv.org/abs/2207.02696>
- [40] J. Solawetz and Francesco. What is YOLOv8? a complete guide.
- [41] C.-Y. Wang, I.-H. Yeh, and H.-Y. M. Liao, “YOLOv9: Learning what you want to learn using programmable gradient information,” version Number: 2. [Online]. Available: <https://arxiv.org/abs/2402.13616>
- [42] A. Wang, H. Chen, L. Liu, K. Chen, Z. Lin, J. Han, and G. Ding, “YOLOv10: Real-time end-to-end object detection,” version Number: 2. [Online]. Available: <https://arxiv.org/abs/2405.14458>
- [43] YOLO11: Faster than you can imagine! [Online]. Available: <https://learnopencv.com/yolo11/>
- [44] S. Cepeda, O. Esteban-Sinovas, R. Romero, V. Singh, P. Shetty, A. Moiyadi, I. Zemmoura, G. R. Giammalva, M. Del Bene, A. Barbotti, F. DiMeco, T. R. West, B. V. Nahed, I. Arrese, R. Hornero, and R. Sarabia, “Real-time brain

- tumor detection in intraoperative ultrasound using YOLO11: From model training to deployment in the operating room,” version Number: 1. [Online]. Available: <https://arxiv.org/abs/2501.15994>
- [45] Hand landmarks detection guide. [Online]. Available: https://ai.google.dev/edge/mediapipe/solutions/vision/hand_landmarker
- [46] Hand landmarks detection guide. [Online]. Available: https://ai.google.dev/edge/mediapipe/solutions/vision/hand_landmarker
- [47] T. Afwan. Indonesian sign language/ bahasa isyarat indonesia. [Online]. Available: <https://www.kaggle.com/datasets/teukumariefafwan/indonesian-sign-language-bahasa-isyarat-indonesia>
- [48] MOV vs. MP4 | video file formats. [Online]. Available: <https://www.cloudflare.com/en-ca/learning/video/mov-vs-mp4/>
- [49] C. Feichtenhofer, “X3d: Expanding architectures for efficient video recognition,” version Number: 1. [Online]. Available: <https://arxiv.org/abs/2004.04730>
- [50] W. Li, W. Lei, K. Shi, Z. Shi, Y. Wang, and J. Zhou, “mmSkeleton: 3d human skeleton estimation using millimeter wave radar sparse point clouds,” in *2024 IEEE/CIC International Conference on Communications in China (ICCC)*. IEEE, pp. 307–312. [Online]. Available: <https://ieeexplore.ieee.org/document/10681946/>

