

## DAFTAR PUSTAKA

- [1] A. Mekkodathil *et al.*, “Epidemiological and clinical characteristics of fall-related injuries: a retrospective study,” *BMC Public Health*, vol. 20, no. 1, 2020, doi: 10.1186/s12889-020-09268-2.
- [2] S. Schick, D. Heinrich, M. Graw, R. Aranda, U. Ferrari, and S. Peldschus, “Fatal falls in the elderly and the presence of proximal femur fractures,” *Int. J. Legal Med.*, vol. 132, no. 6, 2018, doi: 10.1007/s00414-018-1876-7.
- [3] H. Margareth, *Buku Monograf I-FRAT (Indonesian Fall Risk Assesment Tool, Alat Deteksi Risiko Jatuh Pada Lansia di Indonesia)*, 1st ed. Depok: PT RajaGrafindo Persada, 2019.
- [4] Jagnoor J and Peden M, *Handbook of global health*, 1st ed. in Handbook of Global Health. Cham, Switzerland: Springer Nature, 2021. doi: 10.1007/978-3-030-45009-041.
- [5] S. Mekruksavanich and A. Jitpattanakul, “FallNeXt: A Deep Residual Model based on Multi-Branch Aggregation for Sensor-based Fall Detection,” *ECTI Trans. Comput. Inf. Technol.*, vol. 16, no. 4, pp. 352–364, 2022, doi: 10.37936/ecti-cit.2022164.248156.
- [6] S. K. Bhoi *et al.*, “FallDS-IoT: A Fall Detection System for Elderly Healthcare Based on IoT Data Analytics,” *Proc. - 2018 Int. Conf. Inf. Technol. ICIT 2018*, pp. 155–160, 2018, doi: 10.1109/ICIT.2018.00041.
- [7] K. L. Lu and E. T. H. Chu, “An image-based fall detection system for the elderly,” *Appl. Sci.*, vol. 8, no. 10, 2018, doi: 10.3390/app8101995.
- [8] A. P. Yunus, K. Morita, N. C. Shirai, and T. Wakabayashi, “Time Series Self-Attention Approach for Human Motion Forecasting: A Baseline 2D Pose Forecasting,” *J. Adv. Comput. Intell. Intell. Informatics*, vol. 27, no. 3, pp. 445–457, 2023, doi: 10.20965/jaciii.2023.p0445.
- [9] A. Vaswani *et al.*, “Attention is all you need,” *Adv. Neural Inf. Process. Syst.*, vol. 2017-Decem, no. Nips, pp. 5999–6009, 2017.
- [10] X. Yang, “An Overview of the Attention Mechanisms in Computer Vision,” *J. Phys. Conf. Ser.*, vol. 1693, no. 1, 2020, doi:

10.1088/1742-6596/1693/1/012173.

- [11] H. Ramirez, S. A. Velastin, I. Meza, E. Fabregas, D. Makris, and G. Farias, “Fall Detection and Activity Recognition Using Human Skeleton Features,” *IEEE Access*, vol. 9, pp. 33532–33542, 2021, doi: 10.1109/ACCESS.2021.3061626.
- [12] L. Yao, W. Min, and K. Lu, “A New Approach to Fall Detection Based on the Human Torso Motion Model,” *Appl. Sci.*, vol. 7, no. 10, 2017, doi: 10.3390/app7100993.
- [13] H. Mankodiya *et al.*, “XAI-Fall: Explainable AI for Fall Detection on Wearable Devices Using Sequence Models and XAI Techniques,” *Mathematics*, vol. 10, no. 12, 2022, doi: 10.3390/math10121990.
- [14] B. H. Wang, J. Yu, K. Wang, X. Y. Bao, and K. M. Mao, “Fall Detection Based on Dual-Channel Feature Integration,” *IEEE Access*, vol. 8, pp. 103443–103453, 2020, doi: 10.1109/ACCESS.2020.2999503.
- [15] A. Y. Alaoui, Y. Tabii, R. O. H. Thami, M. Daoudi, S. Berretti, and P. Pala, “Fall detection of elderly people using the manifold of positive semidefinite matrices,” *J. Imaging*, vol. 7, no. 7, 2021, doi: 10.3390/jimaging7070109.
- [16] A. Bansal, R. Sharma, and M. Kathuria, “A Vision-Based Approach to Enhance Fall Detection with Fine-Tuned Faster R-CNN,” *Proc. - 2023 Int. Conf. Adv. Comput. Commun. Technol. ICACCTech 2023*, pp. 678–684, 2023, doi: 10.1109/ICACCTech61146.2023.00114.
- [17] G. J. Horng and K. H. Chen, *The Smart Fall Detection Mechanism for Healthcare Under Free-Living Conditions*, vol. 118, no. 1. Springer US, 2021. doi: 10.1007/s11277-020-08040-4.
- [18] C. A. U. Hassan *et al.*, “A Cost-Effective Fall-Detection Framework for the Elderly Using Sensor-Based Technologies,” *Sustain.*, vol. 15, no. 5, 2023, doi: 10.3390/su15053982.
- [19] W. Guo, Y. Du, X. Shen, V. Lepetit, X. Alameda-Pineda, and F. Moreno-Noguer, “Back to MLP: A Simple Baseline for Human Motion Prediction,” *Proc. - 2023 IEEE Winter Conf. Appl. Comput. Vision, WACV 2023*, pp. 4798–4808, 2023, doi: 10.1109/WACV56688.2023.00479.
- [20] L. Gril, P. Wedenig, C. Torkar, and U. Kleb, “A Tensor-based Regression Approach for Human Motion Prediction,” *Qual.*

- Reliab. Eng. Int.*, vol. 39, no. 2, pp. 481–499, 2023, doi: 10.1002/qre.3153.
- [21] W. Mao, M. Liu, and M. Salzmann, “Generating Smooth Pose Sequences for Diverse Human Motion Prediction,” pp. 13289–13298, 2022, doi: 10.1109/iccv48922.2021.01306.
- [22] W. Mao, M. Liu, M. Salzmann, and H. Li, “Multi-level Motion Attention for Human Motion Prediction,” *Int. J. Comput. Vis.*, vol. 129, no. 9, pp. 2513–2535, 2021, doi: 10.1007/s11263-021-01483-7.
- [23] X. Shu, L. Zhang, G. J. Qi, W. Liu, and J. Tang, “Spatiotemporal Co-Attention Recurrent Neural Networks for Human-Skeleton Motion Prediction,” *IEEE Trans. Pattern Anal. Mach. Intell.*, vol. 44, no. 6, pp. 3300–3315, 2022, doi: 10.1109/TPAMI.2021.3050918.
- [24] O. Medjaouri and K. Desai, “HR-STAN: High-Resolution Spatio-Temporal Attention Network for 3D Human Motion Prediction,” *IEEE Comput. Soc. Conf. Comput. Vis. Pattern Recognit. Work.*, vol. 2022-June, pp. 2539–2548, 2022, doi: 10.1109/CVPRW56347.2022.00286.
- [25] L. Chen, R. Liu, X. Yang, D. Zhou, Q. Zhang, and X. Wei, “STTG-net: a Spatio-temporal network for human motion prediction based on transformer and graph convolution network,” *Vis. Comput. Ind. Biomed. Art*, vol. 5, no. 1, 2022, doi: 10.1186/s42492-022-00112-5.
- [26] S. Dubey and M. Dixit, “A comprehensive survey on human pose estimation approaches,” *Multimed. Syst.*, vol. 29, no. 1, pp. 167–195, 2023, doi: 10.1007/s00530-022-00980-0.
- [27] K. Mangalam, E. Adeli, K. H. Lee, A. Gaidon, and J. C. Niebles, “Disentangling human dynamics for pedestrian locomotion forecasting with noisy supervision,” *Proc. - 2020 IEEE Winter Conf. Appl. Comput. Vision, WACV 2020*, pp. 2773–2782, 2020, doi: 10.1109/WACV45572.2020.9093350.
- [28] V. Guzov, A. Mir, T. Sattler, and G. Pons-Moll, “Human POSEitioning System (HPS): 3D Human Pose Estimation and Self-localization in Large Scenes from Body-Mounted Sensors,” *Proc. IEEE Comput. Soc. Conf. Comput. Vis. Pattern Recognit.*, pp. 4316–4327, 2021, doi: 10.1109/CVPR46437.2021.00430.
- [29] Y. Ben-Shabat *et al.*, “The IKEA ASM Dataset: Understanding

- people assembling furniture through actions, objects and pose,” *Proc. - 2021 IEEE Winter Conf. Appl. Comput. Vision, WACV 2021*, pp. 846–858, 2021, doi: 10.1109/WACV48630.2021.00089.
- [30] U. Sirisha, S. P. Praveen, P. N. Srinivasu, P. Barsocchi, and A. K. Bhoi, “Statistical Analysis of Design Aspects of Various YOLO-Based Deep Learning Models for Object Detection,” *Int. J. Comput. Intell. Syst.*, vol. 16, no. 1, pp. 1–29, 2023, doi: 10.1007/s44196-023-00302-w.
- [31] J. Lee and K. il Hwang, “YOLO with adaptive frame control for real-time object detection applications,” *Multimed. Tools Appl.*, vol. 81, no. 25, pp. 36375–36396, 2022, doi: 10.1007/s11042-021-11480-0.
- [32] J. Redmon, S. Divvala, R. Girshick, and A. Farhadi, “You only look once: Unified, real-time object detection,” *Proc. IEEE Comput. Soc. Conf. Comput. Vis. Pattern Recognit.*, vol. 2016-Decem, pp. 779–788, 2016, doi: 10.1109/CVPR.2016.91.
- [33] J. Terven, D. M. Córdova-Esparza, and J. A. Romero-González, “A Comprehensive Review of YOLO Architectures in Computer Vision: From YOLOv1 to YOLOv8 and YOLO-NAS,” *Mach. Learn. Knowl. Extr.*, vol. 5, no. 4, pp. 1680–1716, 2023, doi: 10.3390/make5040083.
- [34] D. Maji, S. Nagori, M. Mathew, and D. Poddar, “YOLO-Pose: Enhancing YOLO for Multi Person Pose Estimation Using Object Keypoint Similarity Loss,” *IEEE Comput. Soc. Conf. Comput. Vis. Pattern Recognit. Work.*, vol. 2022-June, pp. 2636–2645, 2022, doi: 10.1109/CVPRW56347.2022.00297.
- [35] M. F. R. Lee, Y. C. Chen, and C. Y. Tsai, “Deep Learning-Based Human Body Posture Recognition and Tracking for Unmanned Aerial Vehicles,” *Processes*, vol. 10, no. 11, pp. 1–22, 2022, doi: 10.3390/pr10112295.
- [36] C. Fang, H. Xiang, C. Leng, J. Chen, and Q. Yu, “Research on Real-Time Detection of Safety Harness Wearing of Workshop Personnel Based on YOLOv5 and OpenPose,” *Sustain.*, vol. 14, no. 10, 2022, doi: 10.3390/su14105872.
- [37] N. Shlezinger, Y. C. Eldar, and S. P. Boyd, “Model-Based Deep Learning: On the Intersection of Deep Learning and Optimization,” *IEEE Access*, vol. 10, 2022, doi: 10.1109/ACCESS.2022.3218802.

- [38] N. Ketkar, “Stochastic Gradient Descent BT - Deep Learning with Python: A Hands-on Introduction,” in *Deep Learning with Python*, 2017.
- [39] D. P. Kingma and J. L. Ba, “Adam: A method for stochastic optimization,” in *3rd International Conference on Learning Representations, ICLR 2015 - Conference Track Proceedings*, 2015.
- [40] Z. Zhuang, M. Liu, A. Cutkosky, and F. Orabona, “Understanding AdamW through Proximal Methods and Scale-Freeness.” [Online]. Available: <https://openreview.net/forum?id=IKhEPWGdwK>
- [41] Y. Ho and S. Wookey, “The Real-World-Weight Cross-Entropy Loss Function: Modeling the Costs of Mislabeling,” *IEEE Access*, vol. 8, 2020, doi: 10.1109/ACCESS.2019.2962617.
- [42] A. P. Yunus, K. Morita, N. C. Shirai, and T. Wakabayashi, “Temporal-Spatial Time Series Self-Attention 2D & 3D Human Motion Forecasting.” IEEE International Conference on Industry 4.0, Artificial Intelligence, and Communications Technology (IAICT), BALI, Indonesia, pp. 66–72, 2023. doi: 10.1109/IAICT59002.2023.10205596.
- [43] F. E. Szabo, “The Linear Algebra Survival Guide,” *Linear Algebr. Surviv. Guid.*, pp. 78–100, 2015, doi: 10.1016/B978-0-12-409520-5.50011-4.
- [44] Suyanto, K. N. Ramadhani, and S. Mandala, “Deep Learning : Modernisasi Machine Learning untuk Big Data,” 2019. [Online]. Available: <https://api.semanticscholar.org/CorpusID:213390171>
- [45] C. Eraso, “Dataset CAUCAFall.” Mendeley, 2022.