REFERENCES

[1] R. Raj and A. Kos, "A Comprehensive Study of Mobile Robot: History, Developments, Applications, and Future Research Perspectives," *Applied Sciences,* vol. 12, no. 14, 2022.

[2] H. Durrant-Whyte and T. Bailey, "Simultaneous localization and mapping: part I," *IEEE Robotics & Automation Magazine,* vol. 13, no. 2, pp. 99-110, 2006.

[3] R. Mur-Artal, J. M. M. Montiel and J. D. Tardós, "ORB-SLAM: A Versatile and Accurate Monocular SLAM System," *IEEE Transactions on Robotics,* vol. 31, no. 5, pp. 1147-1163, 2015.

[4] Q. Zang, K. Zhang, L. Wang and L. Wu, "An Adaptive ORB-SLAM3 System for Outdoor Dynamic Environments," *Sensors,* vol. 23, no. 3, 2023.

[5] W. Deng, K. Huang, X. Chen, Z. Zhou, C. Shi, R. Guo and H. Zhang, "Semantic RGB-D SLAM for Rescue Robot Navigation," *IEEE Access,* vol. 8, pp. 221320-221329, 2020.

[6] X. Zhao, T. Zuo and X. Hu, "OFM-SLAM: a visual semantic SLAM for dynamic indoor environments," *Mathematical Problems in Engineering,* vol. 2021, pp. 1-16, 2021.

[7] BNPB, Risiko Bencana Indonesia: Memahami Risiko Sistemik di Indonesia, Jakarta: Pusat Data Informasi Komunikasi Bencana BNPB, 2023.

[8] R. Siegwart, I. R. Nourbakhsh and D. Scaramuzza, Introduction to Autonomous Mobile Robot, MIT Press, 2011.

[9] W. Chen, G. Shang, A. Ji, C. Zhou, X. Wang, C. Xu, Z. Li and K. Hu, "An

Overview on Visual SLAM: From Tradition to Semantic," *Remote Sensing,* vol. 14, no. 13, p. 3010, 2022.

[10] K. Yousif, A. Bab-Hadiashar and R. Hoseinnezhad, "An Overview to Visual Odometry and Visual SLAM: Applications to Mobile Robotics," *Intelligent Industrial Systems,* vol. 1, no. 4, pp. 289-311, 2015.

[11] C. Campos, R. Elvira, J. J. G. Rodriguez, J. M. Montiel and J. D. Tardos, "Orb-slam3: An accurate open-source library for visual, visual--inertial, and multimap slam," *IEEE Transactions on Robotics,* vol. 37, no. 6, pp. 1874-1890, 2021.

[12] J. Redmon, S. Divvala, R. Girshick and A. Farhadi, "You only look once: Unified, real-time object detection," in *IEEE conference on computer vision and pattern recognition*, 2016.

[13] G. Jocher, A. Chaurasia and J. Qiu, *Ultralytics YOLO,* 2023.

[14] RangeKing, "Brief summary of YOLOv8 model structure #189," [Online]. Available: https://github.com/ultralytics/ultralytics/issues/189.

[15] Raspberry Pi, "Raspberry Pi 4 Model B Specification," [Online]. Available: https://www.raspberrypi.com/products/raspberry-pi-4-model-b/specifications/. [Accessed 1 May 2023].

[16] M. Quigley, K. Conley, B. Gerkey, J. Faust, T. Foote, J. Leibs, R. Wheeler, A. Y. Ng and others, "ROS: an open-source Robot Operating System," in *ICRA workshop on open source software*, Kobe, Japan, 2009.

[17] T.-Y. Lin, M. Maire, S. J. Belongie, L. D. Bourdev, R. B. Girshick, J. Hays, P. Perona, D. Ramanan, P. Dollár and C. L. Zitnick, "Microsoft COCO: Common Objects in Context," *CoRR,* vol. 1405.0312, 2014.

[18] Y. Dadwhal, S. Kumar and H. K. Sardana, *Simulated Disaster Victim (SDV1 & SDV2) dataset,* IEEE Dataport, 2019.

[19] Y. S. Dadwhal, S. Kumar and H. K. Sardana, “Data-Driven Skin Detection in Cluttered Search and Rescue Environments,” *IEEE Sensors Journal,* vol. 20, no. 7, pp. 3697-3708, 2020.

[20] J. Sturm, N. Engelhard, F. Endres, W. Burgard and D. Cremers, “A Benchmark for the Evaluation of RGB-D SLAM Systems,” in *International Conference on Intelligent Robot Systems (IROS)*, 2012.