

DAFTAR PUSTAKA

- [1] X. You, X. Chen, R. Liu, T. Yang, M. Guo, and D. Zhang, “Enabling Respiration Monitoring Using WiFi CSI: A Survey,” *IEEE Internet Things J.*, vol. 10, no. 1, pp. 507–524, Jan. 2023, doi: 10.1109/JIOT.2022.3194989.
- [2] Y. Zeng, D. Wu, J. Xiong, E. Yi, R. Gao, and D. Zhang, “FarSense: Pushing the Range Limit of WiFi-based Respiration Sensing with CSI Ratio of Two Antennas,” *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.*, vol. 3, no. 3, pp. 1–26, Sept. 2019, doi: 10.1145/3351279.
- [3] W. Wang, A. X. Liu, M. Shahzad, K. Ling, and S. Lu, “Device-Free Human Activity Recognition Using Commercial WiFi Devices,” *IEEE J. Sel. Areas Commun.*, vol. 35, no. 5, pp. 1118–1131, May 2017, doi: 10.1109/JSAC.2017.2679741.
- [4] J. Liu, Y. Wang, Y. Chen, and M. Gruteser, “Tracking Vital Signs During Sleep Leveraging Off-the-Shelf WiFi,” in *Proceedings of the 16th ACM International Symposium on Mobile Ad Hoc Networking and Computing*, ACM, 2015. doi: 10.1145/2746285.2746339.
- [5] Intel Corporation (centang “Author is Corporate”), “Intel® Wi-Fi 6E AX210 (Gig+) Product Brief,” Intel. Accessed: May 29, 2025. [Online]. Available: <https://www.intel.com/content/www/us/en/products/docs/wireless/wi-fi-6e-ax210-brief.html>
- [6] S. M. Hernandez and E. Bulut, “WiFi Sensing on the Edge: Signal Processing Techniques and Challenges for Real-World Systems,” *IEEE Commun. Surv. Tutor.*, vol. 25, no. 1, pp. 46–76, 2023, doi: 10.1109/COMST.2022.3209144.
- [7] F. Adib and D. Katabi, “See through walls with WiFi!”.
- [8] J. D. Cardenas, C. A. Gutierrez, and R. Aguilar-Ponce, “Influence of the Antenna Orientation on WiFi-Based Fall Detection Systems,” *Sensors*, vol. 21, no. 15, p. 5121, July 2021, doi: 10.3390/s21155121.
- [9] K. Pahlavan and P. Krishnamurthy, “Evolution and Impact of Wi-Fi Technology and Applications: A Historical Perspective,” *Int. J. Wirel. Inf. Netw.*, vol. 28, no. 1, pp. 3–19, Mar. 2021, doi: 10.1007/s10776-020-00501-8.
- [10] E. Mozaffariahrar, F. Theoleyre, and M. Menth, “A Survey of Wi-Fi 6: Technologies, Advances, and Challenges,” *Future Internet*, vol. 14, no. 10, p. 293, Oct. 2022, doi: 10.3390/fi14100293.
- [11] Y. He, Y. Chen, Y. Hu, and B. Zeng, “WiFi Vision: Sensing, Recognition, and Detection With Commodity MIMO-OFDM WiFi,” *IEEE Internet Things J.*, vol. 7, no. 9, pp. 8296–8317, Sept. 2020, doi: 10.1109/JIOT.2020.2989426.
- [12] M. B. Majed, T. A. Rahman, and O. Abdul Aziz, “Propagation Path Loss Modeling and Outdoor Coverage Measurements Review in Millimeter Wave Bands for 5G Cellular Communications,” *Int. J. Electr. Comput. Eng. IJECE*, vol. 8, no. 4, p. 2254, Aug. 2018, doi: 10.11591/ijece.v8i4.pp2254-2260.
- [13] S. Ju *et al.*, “Scattering Mechanisms and Modeling for Terahertz Wireless Communications,” Mar. 09, 2019, *arXiv*: arXiv:1903.02657. doi: 10.48550/arXiv.1903.02657.



- [14] D. Halperin, W. Hu, A. Sheth, and D. Wetherall, "Tool Release: Gathering 802.11n Traces with Channel State Information," *ACM SIGCOMM Comput. Commun. Rev.*, vol. 41, no. 1, Jan. 2011, doi: 10.1145/1925861.1925870.
- [15] Z. Jiang, "PicoScenes CSI Data Processing Platform," PicoScenes. Accessed: May 29, 2025. [Online]. Available: <https://ps.zpj.io/>
- [16] Z. Jiang *et al.*, "Eliminating the Barriers: Demystifying Wi-Fi Baseband Design and Introducing the PicoScenes Wi-Fi Sensing Platform," 2020, *arXiv*. doi: 10.48550/ARXIV.2010.10233.
- [17] Y. Zeng, D. Wu, R. Gao, T. Gu, and D. Zhang, "FullBreathe: Full Human Respiration Detection Exploiting Complementarity of CSI Phase and Amplitude of WiFi Signals," *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.*, vol. 2, no. 3, pp. 1–19, Sept. 2018, doi: 10.1145/3264958.
- [18] N. Sobhan, "Narrative Review Article: An Overview of The Anatomy and Physiology of Respiration," vol. 3, no. 2, 2024.
- [19] K. Kanamori *et al.*, "Associations of heart rates and respiratory rates with lifestyle and environmental factors in toddlers: a nationwide cohort study," *BMC Pediatr.*, vol. 25, no. 1, p. 510, July 2025, doi: 10.1186/s12887-025-05867-3.
- [20] A. Nicolò, C. Massaroni, E. Schena, and M. Sacchetti, "The Importance of Respiratory Rate Monitoring: From Healthcare to Sport and Exercise," *Sensors*, vol. 20, no. 21, p. 6396, Nov. 2020, doi: 10.3390/s20216396.
- [21] A. Herbert, J. Pearn, and S. Wilson, "Normal Percentiles for Respiratory Rate in Children—Reference Ranges Determined from an Optical Sensor," *Children*, vol. 7, no. 10, p. 160, Oct. 2020, doi: 10.3390/children7100160.
- [22] A. Khalili, A. Soliman, M. Asaduzzaman, and A. Griffiths, "Wi-Fi sensing: applications and challenges," *J. Eng.*, vol. 2020, no. 3, pp. 87–97, Mar. 2020, doi: 10.1049/joe.2019.0790.
- [23] W. Zhuang, Y. Lu, Y. Shen, and J. Su, "Human Daily Breathing Monitoring via Analysis of CSI Ratio Trajectories for WiFi Link Pairs on the I/Q Plane," *Sensors*, vol. 24, no. 22, p. 7352, Nov. 2024, doi: 10.3390/s24227352.
- [24] S. H. Ahmed, S. H. Bouk, N. Javaid, and I. Sasase, "Combined Human, Antenna Orientation in Elevation Direction and Ground Effect on RSSI in Wireless Sensor Networks," in *2012 10th International Conference on Frontiers of Information Technology*, Islamabad, Pakistan: IEEE, Dec. 2012, pp. 46–49. doi: 10.1109/FIT.2012.17.
- [25] Y. He, Y. Chen, Y. Hu, and B. Zeng, "WiFi Vision: Sensing, Recognition, and Detection With Commodity MIMO-OFDM WiFi," *IEEE Internet Things J.*, vol. 7, no. 9, pp. 8296–8317, Sept. 2020, doi: 10.1109/JIOT.2020.2989426.
- [26] Z. Yang, P. H. Pathak, Y. Zeng, X. Liran, and P. Mohapatra, "Monitoring vital signs using millimeter wave," in *Proceedings of the 17th ACM International Symposium on Mobile Ad Hoc Networking and Computing*, Paderborn Germany: ACM, July 2016, pp. 211–220. doi: 10.1145/2942358.2942381.
- [27] R. Jeya, D. B. Amutha, N. Nikhilesh, and R. R. Immaculate, "Signal Interferences in Wireless Communication - An Overview".



- [28] Y. Ge and I. W.-H. Ho, “WiFi Amplitude and Phase-Based Respiratory Rate Monitoring,” in *2024 IEEE 99th Vehicular Technology Conference (VTC2024-Spring)*, Singapore, Singapore: IEEE, June 2024, pp. 1–5. doi: 10.1109/VTC2024-Spring62846.2024.10683375.
- [29] “Digital Signal Processing - Computer Based Approach - Sanjit K. Mitra.”
- [30] H. Zhou, Y. Zhang, and M. Temiz, “High-Resolution Indoor Sensing Using Channel State Information of WiFi Networks,” *Electronics*, vol. 12, no. 18, p. 3931, Sept. 2023, doi: 10.3390/electronics12183931.
- [31] “UploadFile_2230.”
- [32] M. Hasegawa-Johnson, “Lecture 19: Autocorrelation”.
- [33] A. D. Myttenaere, B. Golden, B. L. Grand, and F. Rossi, “Mean Absolute Percentage Error for regression models,” *Neurocomputing*, vol. 192, pp. 38–48, June 2016, doi: 10.1016/j.neucom.2015.12.114.

