References

- [1] C. Li, W. Chen, G. Liu, R. Yan, H. Xu and Y. Qi, "A Noncontact FMCW Radar Sensor for Displacement Measurement in Structural Health Monitoring," *Sensor*, vol. 15, pp. 7412-7433, 2015.
- [2] M. R. Kaloop, E. Elbeltagi, J. W. Hu and A. Elrefai, "Recent Advances of Structures Monitoring and Evaluation Using GPS-Time Series Monitoring Systems: A Review," *International Journal of Geo-Information*, vol. 6, p. 382, 2017.
- [3] D. Zhang, M. Kurata and T. Inaba, "Small Displacement Detection of Biological Signals Using the Cyclic Frequency Method," *International Journal of Antennas and Propagation*, vol. 2015, p. 5, 2015.
- [4] C. Zhong, Y. Liu, P. Gao, W. Chen, H. Li, Y. Hou, T. Nuremanguli and H. Ma, "Landslide Mapping with Remote Sensing: Challenges and Opportunities," *International Journal of Remote Sensing*, 2019.
- [5] K. A. C. de Macedo, F. L. G. Ramos, C. Gaboardi and J. R. Moreira, "A Compact Ground-Based Interferometric Radar for Landslide Monitoring: The Xerem Experiment," *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, vol. 10, pp. 975 986, 2017.
- [6] F. Liang, F. Qi, Q. An, H. Lv, F. Chen, Z. Li and J. Wang, "Detection of Multiple Stationary Humans Using UWB MIMO Radar," *Sensor*, vol. 16, p. 1922, 2016.
- [7] C.-H. Hsieh, Y.-F. Chiu, . Y.-H. Shen, T.-S. Chu and Y.-H. Huang, "UWB Radar Signal Processing Platform for Real-Time Human Respiratory Feature Extraction Based on Four Segment Linear Waveform Model," *IEEE Transactions on Biomedical Circuits and Systems*, vol. 10, no. 1, pp. 219 230, 2016.
- [8] K. S, S. J, L. A, M. S and L. C, "RCS of a trihedral corner reflector," in *Symposium on Antenna Technology and Applied Electromagnetics [ANTEM 1994]*, Canada, 1994.
- [9] Y. Qin, D. Perissin and . L. Lei, "The Design and Experiments on Corner Reflectors for Urban Ground Deformation Monitoring in Hong Kong," *International Journal of Antennas and Propagation*, vol. 2013, pp. 1-8, 2013.

- [10] S. K and C. Tsen-Chieh, "Optimum Corner Reflectors Design," in *Proceedings of the 1996 IEEE National Radar Conference*, USA, 1996.
- [11] C. Li, Y. Xiao and J. Lin, "Experiment and Spectral Analysis of a Low-Power Ka-Band Heartbeat Detector Measuring From Four Sides of a Human Body," *IEEE Transactions on Microwave Theory and Techniques*, vol. 54, no. 12, pp. 4464 4471, 2006.
- [12] W. M, E. H, A. I and M. T, "Non-contact measurement of heart rate using FM-CW radar," in *IEICE Technical Report SANE2005-3*, Japanese, 2005.
- [13] A. I, "Life-Detection Radar for Rescue Purpose," in *IEICE Technical Report SANE99-100*, Japanese, 2000.
- [14] J. J. Lee and M. Shinozuka, "A Vision-Based System for Remote Sensing of Bridge Displacement," *NDT&E International*, vol. 39, p. 425–431, 2006.
- [15] M.-B. Su, I.-H. Chen and C.-H. Liao, "Using TDR Cables and GPS for Landslide Monitoring in High Mountain Area," *Journal of Geotechnical and Geoenvironmental Engineering*, vol. 135, pp. 1113-1121, 2009.
- [16] M. I. Skolnik, Radar Handbook, 3rd Edition, America, 2001.
- [17] A. A. Pramudita, F. Y. Suratman, D. Arseno and E. Ali, "FMCW Radar Post Processing Method for Small Displacement Detection," in *IEEE International Conference on Aerospace Electronics and Remote Sensing Technology (ICARES)*, Bali, Indonesia, 2018.
- [18] D. Zhang, M. Kurata and T. Inaba, "FMCW Radar for Small Displacement Detection of Vital Signal Using Projection Matrix Method," *International Journal of Antennas and Propagation*, vol. 2013, pp. 1-5, 2013.
- [19] M. Alizadeh, G. Shaker and S. Safavi-Naeini, "Experimental Study On the Phase Analysis of FMCW radar for Vital Signs Detection," in *13th European Conference on Antennas and Propagation (EuCAP 2019)*, Canada, 2019.
- [20] "TTR500 Series Vector Network Analyzer (VNA)," Tektronix, 2018. [Online]. Available: https://www.tek.com/vna/ttr500. [Accessed 9 November 2020].
- [21] A. A. Pramudita, T. O. Praktika and S. Jannah, "Radar Modeling Experiment Using Vector Network Analyzer," in 2020 International Symposium On Antenna And Propagation, Osaka, Japan, 2021.
- [22] J. H. Y., T. Inbok Lee, "24 GHz FMCW Radar Systems for Blind Spot Detection System," *KSAE11-B0252*, 2011.

- [23] S. Aulia1, "Analysis of Radar Frequency Modulated Continuous Wave Signal Processing for Object Detection," *Journal National*, vol. Vol. 2 No.2 September 2013, p. 51, 2013.
- [24] B. R. Mahafza, Radar Systems Analysis and Design Using MATLAB., Chapman & Hall, 2005.
- [25] R. Parthasarathy, "Fine Resolution Radar for Near-Surface Layer Mapping," Department of Electrical Engineering and Computer Science, University of Kansas, Kansas, 2002.
- [26] E. T. R. B. K. Karlisa Priandana, "X-Band FMCW Radar as Trajectory Tracker on Ship Control," in *ResearchGate*, 2015.
- [27] I. d. I. S. A. Nurul Fathanah Mustahmin, "Optimization of Distance Calculation between Vehicles," *Journal Penelitian Enjiniting (JPE)*, vol. 22, pp. 105-112, 2018.