[15] K. Joslyn and J. Lipor, "A Supervised Learning Approach to Water Quality Parameter Prediction and Fault Detection," in *Proceedings - 2018 IEEE International Conference on Big Data, Big Data 2018*, Jan. 2019, pp. 2511–2514, doi: 10.1109/BigData.2018.8622628.

[16] P. Huang *et al.*, "An integrated modelling system for water quality forecasting in an urban eutrophic estuary: The swan-canning estuary virtual observatory," *J. Mar. Syst.*, vol. 199, p. 103218, Nov. 2019, doi: 10.1016/j.jmarsys.2019.103218.

[17] A. Delgado, A. Aguirre, E. Palomino, and G. Salazar, "Applying triangular whitenization weight functions to assess water quality of main affluents of Rimac river," in *Proceedings of the 2017 Electronic Congress, E-CON UNI 2017*, Jun. 2017, vol. 2018-January, pp. 1–4, doi: 10.1109/ECON.2017.8247308.

[18] N. S. K. Gunda, S. H. Gautam, and S. K. Mitra, "Artificial Intelligence Based Mobile Application for Water Quality Monitoring," *J. Electrochem. Soc.*, vol. 166, no. 9, pp. B3031–B3035, Mar. 2019, doi: 10.1149/2.0081909jes.

[19] P. Wang *et al.*, "Exploring the application of artificial intelligence technology for identification of water pollution characteristics and tracing the source of water quality pollutants," *Sci. Total Environ.*, vol. 693, p. 133440, Nov. 2019, doi: 10.1016/j.scitotenv.2019.07.246.

[20] J. Leo, E. Luhanga, and K. Michael, "Machine Learning Model for Imbalanced Cholera Dataset in Tanzania," *Sci. World J.*, vol. 2019, 2019, doi: 10.1155/2019/9397578.

[21] A. S. Khalid Waleed, P. D. Kusuma, and C. Setianingsih, "Monitoring and classification system of river water pollution conditions with fuzzy logic," in *Proceedings - 2019 IEEE International Conference on Industry 4.0, Artificial Intelligence, and Communications Technology, IAICT 2019*, Jul. 2019, pp. 112–117, doi: 10.1109/ICIAICT.2019.8784857.

[22] U. Shafi, R. Mumtaz, H. Anwar, A. M. Qamar, and H. Khurshid, "Surface Water Pollution Detection using Internet of Things," in *2018 15th International Conference on Smart Cities: Improving Quality of Life Using ICT and IoT, HONET-ICT 2018*, Nov. 2018, pp. 92–96, doi: 10.1109/HONET.2018.8551341.

[23] Y. Wang, J. Zhou, K. Chen, Y. Wang, and L. Liu, "Water quality prediction method based on LSTM neural network," in *Proceedings of the 2017 12th International Conference on Intelligent Systems and Knowledge Engineering, ISKE 2017*, Jul. 2017, vol. 2018-January, pp. 1–5, doi: 10.1109/ISKE.2017.8258814.

[24] R. S. Pressman, *Ingenieria del Software. Un Enfoque Practico*. 2010.

[25] N. Gilbert and A. Rusli, "Single object detection to support requirements modeling using faster R-CNN," *Telkomnika (Telecommunication Comput. Electron. Control.*, vol. 18, no. 2, pp. 830–838, Apr. 2020, doi: 10.12928/TELKOMNIKA.V18I2.14838.

[26] H. Espitia, J. Soriano, I. Machón, and H. López, "Design Methodology for the Implementation of Fuzzy Inference Systems Based on Boolean Relations," *Electronics*, vol. 8, no. 11, p. 1243, Oct. 2019, doi: 10.3390/electronics8111243.