

Water Consumption Prediction Using Machine Learning Algorithm

Prof. S. S. Bhosale¹, Gadekar Pooja², Pandagale Prasad³, Badakh Vijeta⁴, Chaudhary Chaitanya⁵

Faculty, Department of Information Technology ¹

Students, Department of Information Technology ^{2,3,4,5}

Pravara Rural Engineering College, Loni, India

Abstract: *Water is a crucial resource, and regulating its consumption is critical to long-term sustainability. Understanding and anticipating water usage trends has become increasingly important for resource management, conservation, and strategic planning as populations and cities develop. This research analyses and forecasts water use using a predictive model based on the Support Vector Machine (SVM) algorithm and a textual collection of historical data. This technology may predict future demand by identifying water usage patterns, allowing for more efficient water distribution and preventing short ages. To provide accurate forecasts about water usage, the system uses important procedures such as feature extraction, segmentation, and classification.*

Keywords: Water Prediction, Machine Learning, Random Forest, Linear Regression

