

Real Time Urban Flood Prediction and Alerting System

Pallavi J¹, Bindhushree K Gowda², Divya B³, Chandana R⁴, Suhith Balraj⁵

Professor, Department of ECE¹

Students, Department of ECE^{2,3,4,5}

Vidya Vikas Institute of Engineering and Technology, Mysore, India

Abstract: *The proposed system integrates rain sensors to monitor precipitation levels in urban areas. These sensors continuously measure rainfall intensity and send data to a central control unit. By analyzing the rainfall data in real-time and comparing it with predefined thresholds, the system can predict the likelihood of a flood event. To actively manage floodwaters, the system utilizes water pumps strategically placed in critical areas prone to flooding. When the rain sensor detects rainfall exceeding a predetermined threshold, the control unit triggers the water pumps to start extracting excess water from the affected area. This proactive measure helps to prevent the accumulation of water and minimize the risk of flooding.*

Keywords: Flood detection

REFERENCES

- [1] J. Shivang, S. S. Sridhar, "Weather prediction for indian location using Machine learning," International Journal of Pure and Applied Mathematics, vol. 118, no. 22 pp. 1945- 1949, 2018.
- [2] Z. U. Khan and M. Hayat, "Hourly based climate prediction using data mining techniques by comprising entity demean algorithm" Middle-East Journal of Scientific Research 21, vol. 8, pp. 1295-1300, 2014.
- [3] S. S. Bhatkande1, R. G. Hubballi2, "Weather Prediction Based on Decision Tree Algorithm Using Data Mining Techniques." Belgaum India: International Journal of Advanced Research in Computer and Communication Engineering, vol. 5, no.5, pp.483-48, 2016.
- [4] Y. Radhika, and M. Shashi, "Atmospheric temperature prediction using support vector machines." International Journal of Computer Theory and Engineering 1.1, vol. 1, no. 1, pp.1793-8201, 2009.
- [5] D. Chauhan, J. Thakur, "Data mining techniques for Weather Prediction." International Journal of Computer Science Trends and Technology (IJCT), vol. 6, issue 3, pp.249-254, 2018.
- [6] S.S. Badhiye, B. V. Wakode, P. N. Chatur, "Analysis Of Temperature And Humidity Data For Future Value Prediction" International Journal Of Computer Science And Information Technologies , vol. 3, no.1 pp.3012-3014, 2012.