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Flood Detection through AI & IOT

Mr. Wawale S. N.¹, Miss. Gurpreet Kour Punjabi², Miss. Jagruti Barbade³, Miss. Kanchan Darade⁴, Miss. Jadhav Disha⁵

Professor, Department of Information Technology¹
Students, Department of Information Technology^{2,3,4,5}
Amrutvahini Polytechnic, Sangamner, India

Abstract: The climate is changing as a direct result of global warming, which is causing a range of extreme weather events to take place, including floods and intense downpours. The floods are an unexpected increase of water levels is an issue in many places of the world, and it has been known to cause damage to infrastructure as well as human fatalities. The economic effect of this flood event is accentuated for developing nations and countries with a weaker level of economic development. Based on the most recent reports from different parts of the world, terrible floods have resulted in the loss of many lives and have had an impact on a diverse spectrum of people. The last several years have seen significant advancements in technological and computer-based methods to evaluation and collaboration, both of which have contributed to improved detection performance. As a consequence of this, there is an immediate need for a means of recognizing floods. As a result, the Internet of Things devices that have the potential to detect flooding are included into the work that is planned. In order to speed up the process and guarantee precise flood detection, the Decision Making model is combined with the ESP 32 microcontroller.

Keywords: Artificial Intelligence, Internet of things, Flood Detection, ESP32, Machine Learning

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