

## **ABSTRACT**

In the RW 10, Buahbatu Village, Bojongsoang District, Bandung Regency is one of the areas prone to flooding. One way that can be done for mitigation is by using Internet of Things (IoT) technology to control the water level of the dam. This final project discusses the planning development of an IoT-based automation system for flood water control at the dam. This project combines a water level sensor, a microcontroller, and an Android application in the process of real-time water level monitoring and automation as well as manual monitoring of the water pump machine. The result of this final project. This final project proves that the successfully developed system is able to detect the water level with little error and provide early warning to local residents through notifications in the application, through in-app notifications. This final project is expected to make a major contribution in improving the efficiency of mitigation and handling of floods in the region

**Keywords:** Flood, Internet of Things (IoT), automation, dam, flood mitigation