

## **ABSTRACT**

*Flood is a disaster that often strikes, especially in major cities like Jakarta. In the rapidly evolving technological era, it is possible to develop a system that assists communities in facing such disasters. The design and construction of a flood height information system based on a magnetic floating sensor with IoT MQTT protocol has been created to read and present water level information through a smartphone application, aiming to enhance disaster awareness. This system utilizes sensors with magnetic principles, designed in an isolated manner to address accurate reading challenges in polluted water environments. The use of MQTT protocol allows the information generated by the system to be accessed by various devices, with this study focusing on the use of Smartphone Applications as an access medium. This system becomes an anticipatory solution to flood threats by providing real-time and easily accessible information to the public via the device they always carry, namely smartphones. Thus, the implementation of technology in facing flood disasters becomes more effective and responsive, providing benefits in disaster risk mitigation efforts.*

**Keywords:** MQTT, IOT, Sensor, Flood.