



**PROJECT REPORT**

**Catfish Pond Water Quality Monitoring  
System using IoT**

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2024**

## ABSTRACT

*Catfish ponds are one type of freshwater fish farming that has high economic value. Monitoring the water quality of catfish ponds is essential to ensure an optimal environment for fish growth and health. To improve the existing monitoring system, this research focuses on utilizing the Internet of Things (IoT) by using turbidity sensors, pH sensors, and temperature sensors to monitor the water quality of catfish ponds more effectively. Turbidity sensor is used to measure water turbidity, pH sensor to measure water acidity, and temperature sensor to measure water temperature. Data from the three sensors will be collected continuously and displayed in the form of an application. The methods used in this research include system design and implementation, testing turbidity sensors, pH sensors, and temperature. The results of this study can increase efficiency in monitoring the water quality of catfish ponds. This system can help catfish pond owners optimize water conditions, prevent fish diseases, and increase cultivation productivity.*

*Keyword: water quality, turbidity sensor, pH sensor, temperature.*

