

## **ABSTRACT**

*Flooding is one of the adverse impacts on society caused by humans, in addition to land and rain factors. Losses caused by floods include causing economic problems, lack of clean water, health, paralyzing community activities, and can cause fatalities. One solution to the impact of the problem is to create a flood warning information system Dashboard using the prediction of the Radial Base Function. The dashboard is a flood early warning information monitoring system to find out real-time data from water level, river flow discharge and rainfall sensors placed upstream and downstream of the river by utilizing IoT-based technology. Radial Basis Function is an Artificial Neural Network for prediction by taking past data and relevant data and information currently as training data using a mathematical model so that the output of RBF data processing will issue future period data as pre-predicted data. The dashboard display will display three parameters namely water level, river flow discharge and rainfall, as well as an indicator as a notification when the river water level exceeds the level limit. By creating a dashboard for flood warning early warning systems, it will reduce the impact of losses caused by flooding. How to find out the best performance of the RBF model is seen based on the results with the criteria for the smallest Mean Absolute Error (MAE) value and the more the MAE approaches a value of 0, the better the accuracy of the model. From the tests that have been carried out, the best results were obtained from the RBF method, namely the average MAE value in each subdivision of the Cauvery, Godavari, Krishna, Mahanadi, and Son rivers of 0.048%.*

*Keywords: Dashboard, Artificial Neural Network, Prediction, Radial Basis Function*