

# ***RAL NETWORK (ANN) ALGORITHM IN DETECTING PAPER CURRENCY NOMINALS***

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## ***ABSTRACT***

*Money is an object that is accepted by the general public to measure value, exchange and make payments for the purchase of goods and services, and at the same time acts as a means of accumulating wealth and money is often misused in cases of crime. Thus, it is necessary to have a system to detect the nominal currency so that it can easily recognize the nominal paper currency according to the nominal currency. The method used is a Backpropagation Model Artificial Neural Network with Invariant Moment feature extraction. The Backpropagation method has 3 architectures, namely input layer, hidden layer and output layer. Meanwhile, the Backpropagation process includes feedforward and feedbackward. The data used is 48 nominal crop data in nominal currencies of 20,000.00, 50,000.00, and 100,000.00 with details of 32 training data and 16 training data. From the training process, the best results obtained from the training carried out were 93.00% and test results with results above 40.00% then the nominal detection or nominal classification process was only limited to images of 100,000.00, 50,000.00 and 20,000.00 money.*

***Keywords:*** Numbers, Banknotes, Backpropagation, Invariant Moment.