



PROJECT REPORT
COMPARING THE ACTIVATION OF RELU, ELU, AND
TANH FUNCTIONS IN CLASSIFYING BETTA FISH
SPECIES USING CNN

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ABSTRACT

Betta fish is one of the most popular freshwater ornamental fish, especially in Indonesia because in addition to easy maintenance, breeding is also relatively easy. The most common betta fish, especially in Indonesia, are Crowntail, Halfmoon, and Plakat. But some people can't tell the difference between the types. Therefore, in this final project, we will classify the types of betta fish.

The Crowntail has fins that resemble spines or fingers, the Halfmoon has very wide fins and the tail is like a half moon, while the plakat is almost the same as the halfmoon, only the fins are small. Therefore, the author uses CNN to classify the types of betta fish. In addition to classifying the types of betta fish, the author will also compare which 3 activations (Relu, Tanh, Elu) have the best results.

Based on the results of tests that have been carried out by CNN, it can work well to classify the types of betta fish. By using Relu activation, the test results get an accuracy of 80%.

Keyword: Betta fish, CNN, Relu, Classification



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