



PROJECT REPORT
FISH FRESHNESS DETECTION USING
CONVOLUTIONAL NEURAL NETWORK

FERDIAN DARMAWAN WIJAYA
18.K1.0041

Faculty of Computer Science
Soegijapranata Catholic University
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ABSTRACT

The process of sorting fish carried out by fishermen, to select fish based on their quality still uses the manual method and sometimes misses the mark due to the factor of limited sense of sight when tired. So far, the examination has only been physically seen. As a result, when it will be consumed the fish is often damaged. This study tried to apply the Convolutional Neural Network (CNN) algorithm to distinguish between fresh and non-fresh fish.

Convolutional Neural Network (CNN) is part of deep neural networks, a type of artificial neural network commonly used in image recognition and processing. This algorithm is specifically designed to process pixel data and visual imagery. The Convolutional Neural Network algorithm has neurons designed to work like the frontal lobe, especially the visual cortex area of the human and animal brains. The visual cortex is the area responsible for processing information in the form of visual stimuli. This is what makes CNN quite effective in image processing compared to similar neural network algorithms.

The results that we get in this test are images that have been captured and have been run through a dataset in the form of fish eyes that are processed using CNN, in the CNN process convolution will be carried out so that the dataset that was originally in the form of an image will be processed according to the algorithm I use which will later produce a level of accuracy in the dataset so that it can predict fresh and not fresh fish.

Keyword: Convolutional Neural Network , Machine Learning, Fresh Fish Classification, Python

