

ABSTRACT

Stomach is a digestive organ which is the most vulnerable to diseases which are caused by the increased stomach acid productin due to wrong diet. Many people sometimes ignore, even worse underestimate this, but if it's been ingnored too long, it will lead to death. Thus it's necessary for routine check to determine whether there is disturbance in the stomach organ or not. One simple way to check is through the iris or called iridology. Iridology in science is based on an analysist of the composition of the iris. In particular slice has specific advantages, which can record all state organs, body construction, also psychological condition.

In this final project will be made a system which can detect the presence or absence of disturbances in someone's stomach. This software works by taking an image by camera. After that, system will do the feature extraction by using Principal Component Analysis (PCA) and classify it with method Backpropagation Neural Network. From result of testing that has been done, the conclusion is the system is very good at doing classification process with one hidden layer and produce a level of accouracy up to 87,5% from 40 iris image data.

Keyword : iris, eyes, identification, iridology, JST