ABSTRACT

Normally, human blood appear as a liquid called plasma in which comprised of three kind of cells, they are *Erithrosit, Leukosit,* and *Trombosit,* which each of the cells has their own shape, wide cells, texture and function. One of the diagnoses done by medical team in determining whether someone or the patient is health or not is by referring to the photo's result of blood cells that widely known as a *Wright's Stain Image*.

This final project aim to create an assistant tool which able to diagnose the troubling blood cell's image and clasified those disease so is analizing the performance of the involving type or order used from the texture analysis used. Generally, the classification of cell base blood cell's image is consist of two main parts, which are self marked extraction by combining the self cell's wide and statistic texture, in which the texture analyisis involved about 2 types, and self marked classification using *Learning Vector Quantization* (LVQ) artificial nerve networking (JST). The result of extraction, then become an input (vector) to the JST's sorrounding in this thing is LVQ JST.

From the the result of self marked extraction experiment using wide and 2^{nd} texture statistic analysis involving order 3 of median filter, it was obtained the accuracy level of disease classification is about 100% for train data and about 95% for the test data, thus the total of experiment accuracy is about 97.2 %

Keyword : Blood Cell's image, Statistic texture analysis, JST-LVQ