ABSTRACT

Self identity is very important things for human beings. It's been proven by self identity card for everybody, like citizen identity card, student identity card, and others. Beside names and ages, genders also important. Genders are divided in to two, which is man and women.

This final project aim to create an application which able to identify genders by imaging leukocyte and analyze that performance application. By the end of the identification, human genders not only manually visible through microscope, but also help by the computer application. The identification application is needing in human gender identification if there is no information about the genital. On of the example is often found in mutilation victims, bombing or other condition that causing lost identity of victim's genital.

A man and a women's leukocyte have different image. In woman's leukocyte image there is what called drumstick but the man doesn't have. Drumstick is existed in a leukocyte variety, which called neutrofil Drumstick made different between chromosome XX and XY, because the drumstick only exist in XX chromosome. Drumstick is a bump like a stick in neutofil's nucleus cell.

Neuthrophil will be process, not in original shape or analog but already in digital. The methods that I use in this final task is digital image processing. This digital image process including: pre-processing, segmentation, and characteristic extraction. The final output of this process prediction will have accuracy about 70%-100%

Key word: gender, leukosyte, digital image processing