

ABSTRACT

The number of red blood cells in humans is influenced by age and gender. Calculation of red blood cells are needed to facilitate the performance of doctors to analyze the patient's illness. Progress image processing allows the calculation of the image automatically. This application is also expected to help doctors working in remote villages or centers which are still far from teknolnogi progress and lack of medical devices.

In this final will be conducted by making blood cells counting system based digital image processing using morphological branchpoints. The image is going through preprocessing, segmentation, image skeleton after it will produce the points after through the branchpoints.

Tests conducted with the test data up to 20 images that have different image intensities between 10 to 10 images a second. In this study, obtained 96.97% accuracy threshold for 1800, 96.65% threshold fatherly 1500 and 95.65% for threshold 2000.

Keywords: red blood cells, preprocessing, branchpoints morphology, morphological skeleton, threshold.