# AN AUTOMATED DIAGNOSE OF ANEMIA AND MALARIA USING IMAGE PROCESSING



A PROJECT REPORT PRESENTED BY

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## ABSTRACT

# AN AUTOMATED DIAGNOSE OF ANEMIA AND MALARIA USING IMAGE PROCESSING



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Medical imaging is shifting from film to electronic images. The analyzing blood cells system is a sophisticated image management system that will automatically diagnose images of blood cells, compare images, and measure key features in images. The images are annotated by segmentation of objects of interest, classification of the extracted objects, and reasoning about the image contents.

We concentrate on automated diagnosis system. The system is modularized into three stages: Image acquisition, segmentation and feature extraction. At the image acquisition stage suitable techniques are applied to reduce the noise and blurring. The segmentation stage finds and establishes outlines of cells. Finally the feature extraction stage obtains the shape of the cells and useful characteristic such as radius of a cell for segmented image.

As these capabilities mature, we expect that hematologist and physicians in other fields that rely in images will use a system like our system to reduce repetitive work, to provide assistance to physicians in difficult diagnoses, and to manage images in large image databases.