Abstract
Blood smear is a clinical test performed on microscopic digital images routinely investigated by hematologists to diagnose most blood diseases. Blood smear generally composed of Red blood cells (RBC), White blood cells (WBC) and Platelets. The quantities of WBC cell are counted in a sample blood smear and necessary information calculated manually by the doctor for diagnosis for various diseases. So, this differential counting of WBC cells plays very vital role to get high precision results. The main objective of this paper is to construct the computerized automated software to evaluate and classify a blood smear for differential counting of WBC with the help of Digital Image Processing. We also focus on Image segmentation and Feature extraction to classify the different types of WBC at its accuracy. To check the efficiency and robustness of automated system, the comparison between manual and automated counting is done, which gives the 80% accuracy for automated system

References

- www. medichecks. com
- Dwi Anoragainingrum, &quot;Cell segmentation with median Filter and Mathematician morphology Operation&quot;, in Proc. Of the IEEE 10th International Conference on Image Analysis and Processing (ICIAP),1999:1043-1046.
- Centralized website: www. kernal-machines. org
- Gidudu Anthony, Hulley Greg , Marwala Tshilidzi, &quot;Classification of Images Using Support Vector Machines&quot;
- Clark F. Olson in 1999, &quot;Constrained Hough Transforms for Curve Detection&quot; in Computer Vision and Image Understanding Vol. 73, No. 3, March, pp. 329–345
- Gao W. Tang Y and Li X, &quot;Segmentation of Microscopic Images for Counting Leukocytes,&quot; The 2nd IEEE International Conference on Bioinformatics and Biomedical Engineering , Shanghai, 2609-2612.
- Ghosh M Das D Chakraborty C, &quot;Entropy based divergence for Leukocytes image segmentation,&quot; Proceedings of 2010 International Conference on Systems in Medicine and Biology, Kharagpur, 409-413.
- Pooja R Patil, G S Sable, Gauri Anandgaokar, &quot;Counting of WBC and RBC from Blood Images using Gray Thresholding&quot;, International Journal of Research in Engineering and Technology, Volume 3 Issue 4, Apr-2014


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