**Segmentation of White Blood Cells Image Using Adaptive Location and Iteration**

120014015 – GUDIMALLA SAI SVAS

120014055 – THIKKAVARAPU MANIKANTA REDDY

120014057 – VADDI VINAY

**Abstract**:

Segmentation of white blood cells (WBCs) images is meaningful but challenging due to the complex internal characteristics of the cells and external factors, such as illumination and different microscopic views. This paper involves two steps, first step is to locate the White Blood Cells using multiple window method and second step is to segment the image to obtain White Blood Cell sub images. Algorithms used in first and second steps are WBC Adaptive detection and GrabCut algorithm based on dilation respectively. The results demonstrate that the proposed algorithm consistently outperforms other location and segmentation methods, yielding higher recall and better precision rates.

**References**:

[1] Yuehua Liu et.al, “Segmentation of White Blood Cells Image Using Adaptive Location and Iteration”, IEEE JOURNAL OF BIOMEDICAL AND HEALTH INFORMATICS , VOL. 21, NO. 6, NOVEMBER 2017.

Karthikeyan M P