

a smooth term for boundary preservation in order to determine the deviation of each pixel corresponding to the different regions of the cervical pap smear cells. This proposed BKGC- CMSIS scheme inherited Boykov-Kolmogorov Graph Cuts-based image partitioning method for determining the image data through a synergy cloud model that aided in formulating objective functions. This proposed BKGC-CMSIS scheme identified data item through the incorporation of X-condition cloud generator for determining and defining the accurate boundaries of cytoplasm and nuclei derived from the pap smear cells. The simulation results of the proposed BKGC-CMSIS scheme is determined to be superior in mean precision, mean accuracy, processing time, sensitivity and specificity to a maximum degree of 13%, 11%, 16%, 15% and 12% superior to the compared cervical cancer cell segmentation schemes considered for investigation. As the part of the future plan, it is decided to formulate a semantic cervical cell segmentation for further improvement of cervical pap smear cancer cell detection process.

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