Abstract

We applied traditional fuzzy mathematical approach with enhanced initialization procedure to
Fuzzy Mathematical and Shape Theoretic Approach to Cervical Cell Classification

segment Pap smear images of cervical cells. The segmented images of the cervical cells were analyzed with the help of shape theory to classify them accordingly to the presence of abnormality in the morphological behavior of the cells.

References

- D. Dutta Majumdar and M. Bhattacharyya, “Cybernetics approach to medical technologies: application to cancer screening and other diagnostics”, Kybernetes, Vol. 29, No. 7/8, 2004
- R. Sankaranarayana et al, “Accuracy of visual screening for cervical cancer neoplasia:

**Index Terms**

Computer Science Biomedical

**Keywords**

Cervical cells Pap smear Fuzzy
c-means

Nucleus

Cytoplasm