Abstract

During past few decades, medical Image Processing brought a great contribution in visualization of human anatomy and radically enhanced the Computer-aided diagnostic systems. It assists medical practitioners for detection and localization of pathological deformations. In which, the advanced Digital Image Processing techniques are used to analyze the various internal structures of body of the patients. Image segmentation is one of the significant step in any Digital Image Processing application, it aims to simplify and change the representation of an image into something that is more meaningful and easier to analyze. To get the appropriate image segmentation, Edge detection is considered as one of the eminent
and promising techniques. Simply the Edges are characterize boundaries which help to extract the suitable features. In present research work four fuzzy rule based edge detection techniques are applied and their results are comparatively analyzed. It has been found that the segmentation accuracy of 2x2 mask scanning 10 rule based system is more precise than other tested methods. The output image consists of edges and it is a gray type of image.

References

Index Terms

Computer Science

Image Processing

Keywords

Mri (magnetic Resonance Imaging) Ct (computed Tomography) Us (ultrasound Sonography) Fis (fuzzy Inference System) X-ray