

DIAGNOSES OF MEDICAL IMAGE USING NANO DIGITAL TOPOLOGY

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Abstract: In this paper the new concept of nano topological boundary approach is introduced to identify the bone fracture in its digital images.

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1. Introduction

X-ray medical imaging plays a vital role in diagnosis of bone fracture in human body. The X-ray image helps the medical practitioners in decision making and effective management of injuries. In order to improve diagnosis results, the stored digital images are further analyzed using medical image processing. The most common ailment of the human bone is fracture. Bone fractures are nothing but the cracks which occur due to accidents. There are many types of bone fractures such as normal, transverse, comminuted, oblique, spiral, segmented, avulsed, impacted, torus and greenstick [3, 4].

Medical image processing is a field of science that is gaining wide acceptance in healthcare industry due to its technological advances and software breakthroughs. Among the various diseases, bone fracture detection and treatment, which affects many people of all ages, is growing important in modern society. Bone fracture is a common problem even in most developed countries and the number of fractures is increasing rapidly. Bone fracture can occur due to a simple accident or different