

# Digital Image Processing for Medical Diagnosis

**Manjunatha Siddappa<sup>1</sup> and Sindhu B S<sup>2</sup>**

Associate Professor, Department of Electronics and Communication Engineering<sup>1</sup>

UG Students, Department of Electronics and Communication Engineering<sup>2</sup>

S J C Institute of Technology Chickballapur, India

manjunatha1311.ece@sjcit.ac.in and sindhusuresh0520@gmail.com

**Abstract:** *A precise analysis of medical image is an important stage in the contouring phase throughout radiotherapy preparation. Medical images are mostly used as radiographic techniques in diagnosis, clinical studies and treatment planning. Medical image processing tool are also similarly as important. With a medical image processing tool, it is possible to speed up and enhance the operation of the analysis of the medical image. This paper describes medical image processing software tool which attempts to secure the same kind of programmability advantage for exploring applications of the pipelined processors. Digital image processing plays a pivotal role in modern medical diagnosis, enabling accurate analysis and interpretation of medical images. This abstract provides an overview of recent advancements in digital image processing techniques and their applications in medical diagnosis. The abstract explores various image processing methods, including image enhancement, segmentation, feature extraction, and classification. Furthermore, it discusses how these techniques are utilized in different medical imaging modalities such as X-ray, MRI, CT, and ultrasound. Additionally, the abstract highlights the challenges and future directions in this field, emphasizing the importance of interdisciplinary collaboration between medical professionals and computer scientists to develop innovative solutions for improved healthcare outcomes.*

**Keywords:** Image Processing