

A Constructive Evaluation of Medical Image Processing

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Abstract: *A interdisciplinary study field that draws talents from applied mathematics, computer sciences, engineering, statistics, physics, biology, and medicine, biomedical image processing has witnessed enormous development. The use of computer-aided diagnostic processing is already extensively employed in clinical practice. More issues develop as a consequence of the fast growth of high technology and the usage of multiple imaging modalities. One such problem is processing and analyzing a substantial volume of photos in order to give high-quality data for the diagnosis and treatment of illnesses. This course aims to introduce students to the fundamental ideas and methods of medical image processing while igniting their interest in the field's future study and investigation. Both mankind and the entire civilization have gained from the speedy growth of medical research and the production of various pharmaceuticals. Additionally, improvements in contemporary science have been achieved in the surgical profession. However, the most critical prerequisite prior to treatment is a clear and correct diagnosis of the ailment. More sophisticated bioinstruments will enable more accurate diagnosis. The medical picture is crucial to clinical diagnosis, doctor treatment, education, research, and other endeavors. A common misconception about medical imaging is that it uses magnetic resonance imaging and X-ray computed tomography to depict the body's anatomical features. However, it is often more helpful for physiologic function than anatomy. Medical imaging has had a significant impact on the medical industry with the advancement of computer and image technologies. Medical image processing has gained popularity since the quality of medical imaging influences diagnosis. Clinical applications that want to save and retrieve pictures for later use need a practical method to store such images in detail.*

Keywords: Medical Image Processing, Image Segmentation, Feature Extraction.

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