

BONE FRACTURE DETECTION SYSTEM BY IMAGE PROCESSING WITH NEURAL NETWORKS

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Abstract

X-ray imaging is an important tool for diagnosing various bone-related medical conditions. However, the manual analysis of X-ray images is a time-consuming and error-prone task. Therefore, an automated system for detecting bone fractures and body parts in X-ray images can be of great benefit to the medical industry. This project aims to develop an image processing-based software tool to automatically detect bone fractures and body parts in X-ray images. The proposed software tool can be used as a screening tool to quickly identify bone fractures and body parts in X-ray images, which can aid radiologists and medical professionals in making accurate and timely diagnoses. For the purpose of identifying anomalies in other body regions, the system can also be expanded to include additional medical imaging modalities like CT and MRI.

Keywords: Bone fracture detection; Bone crack detection; convolutional neural network; Image processing