Bone Fracture Classification Using EfficientNetV2

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ABSTRACT

Bone fracture detection is a crucial task in the field of medical diagnostics, requiring precise and efficient analysis of radiological images. The project proposes a deep learning framework that uses EfficientNetV2 to accurately and efficiently classify bone fractures from X-ray images. In this project, we propose an advanced deep learning framework that integrates EfficientNetV2 to enhance the classification of fractures. EfficientNetV2, a state-of-the-art convolutional neural network, offers improved accuracy and faster training times, making it highly effective for detecting fractures in medical imaging data such as X-rays.

By leveraging the efficient feature extraction capabilities of EfficientNetV2, the proposed model assists radiologists in identifying subtle fracture patterns, thereby increasing diagnostic reliability and minimizing the potential for human error.

KEYWORDS

Bone Fracture Classification , Fracture Detection , Deep Learning , EffecientNet Version2 , Medical Imaging , X-ray Analysis , Computer-Aided Diagnosis (CAD) , Convolutional Neural Network(CNN) , Radiological Image Processing