



**FINAL YEAR PROJECT REPORT**  
**X-RAY IMAGE ANALYZER**

In fulfillment of the requirement  
For degree of  
BS (COMPUTER SCIENCES)

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## X-RAY IMAGE ANALYZER

### ABSTRACT

The objective of this project is to develop x-ray image analyzer software for the classification of fracture in bones. This report explores different techniques used in the classification of fracture. Different stages involving in the project will be studied and discussed. Finally the end product will be written in the software called Anaconda python.

X-ray is capture for many reasons to diagnose the disease. Therefore the accurate diagnosis of bone fracture is an important aspect to the doctors in medical field. For this purpose digital x-ray images help to provide appropriate treatment. Normally X-ray images are used for bone fracture analysis. The aim of this project is to develop a digital x-ray image analyzer based on image processing system which gives a quick and accurate classification of the fracture based on the information gained from the digital x-ray images which are saved in computer. For this purpose we have used the datasets of the two bones i.e.: fingers and elbow.

Using the Deep learning tool we can classify the images and analyzes the results found from that classification using Convolutional Neural Network and Faster RCNN algorithm.

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