NARASARAOPETA ENGINEERING COLLEGE

(Autonomous)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Batch Number	CB3
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Guide	D. Venkata Reddy
Title	**Bone Fracture Detection**
Domain/Technology	Machine Learning
Dataset link	https://www.kaggle.com/datasets/vuppalaadithyasairam/bone-fracture-detection-using-xrays/data
Base paper link	https://doi.org/10.1016/j.measen.2023.100723
Software Requirements	Browser : Any Latest browser like Chrome Operating System : Windows 10 Language : Python Platform : Google COLAB
Hardware Requirements	Processor : Intel(R) Core™i5-1035G1 CPU @ 2.50GHz RAM : 8GB (7.77 GB usable) System Type : 64-bit operating system, x64-based processor
Abstract	Rapidly developing technologies are emerging every day in different fields, especially in medical environment. However, still some old techniques are quite popular, efficient and effective in this manner. X-Rays are one of these techniques for detection of bone fractures. Nevertheless, sometimes the size of fractures is not significant and could not be detected easily. Therefore, effective and intelligent systems should be designed. This paper aims to develop an intelligent classification system that would be capable of detecting the bone fractures. The developed system comprises of two principal stages. In the first stage, the images of the fractures are processed using different image processing techniques and the next stage is the classification phase, where a model is trained and then tested on processed images. The system will test on different bone fracture images and the results will show high efficiency and a classification rate.

Signature of the Team Members **Signature of the Guide** **Signature of the project coordinator**