

- **Inception v3 Network:** Retrained top layer for categorizing studies as "fracture" or "no fracture" using lateral wrist radiographs.
- **Dilated Convolutions:** Introduced in a study to develop a new backbone network for fracture detection.
- **DCFPN (Dilated Convolutional Feature Pyramid Network):** Used for thigh fracture detection by replacing the backbone network in a contemporary feature pyramid network framework.
- **Two-Stage Fracture-Sensitive CNN:** Developed by Yangling Ma for bone fracture detection.
- **Dimililer's Approach:** Classified bone fractures on X-ray using a neural network after preprocessing.
- **Hagiwara et al.:** Proposed a DL framework for bone age assessment using CNNs, applicable for detecting fractures in younger patients.
- **FracNet Model:** A DL model by Wang et al. for automated fracture diagnosis in X-ray images, combining CNN with a fully linked Conditional Random Field to improve localization accuracy.
- **Zhang et al.:** Created a network using region-based CNN for automatic wrist fracture detection in X-ray images.
- **Cheng et al.:** Developed a cascaded network combining detection and classification networks for precise fracture localization and classification.
- **FractureNet:** A DL framework for common fracture detection, incorporating CNNs and attention mechanisms for improved identification across various datasets.
- **AI in Healthcare:** AI-driven computer-aided diagnosis systems help healthcare professionals improve diagnostic accuracy and patient care.

- **Deep Learning (DL) with CNNs:** Deep learning models, especially CNNs, excel in analyzing medical images by automatically extracting features from raw data.
- **Ensemble AI for Hip Fracture Detection:** Utilized majority voting among three DL models (Xception, EfficientNet, NfNet) for accurate hip fracture diagnosis in AP pelvis X-rays.
- **DenseNet and InceptionResNetV2 Models:** Evaluated for detecting abnormalities in humerus and finger radiographs; DenseNet-201 and InceptionResNetV2 performed well on humerus images but less so on finger images due to inter-radiologist variation.