* Musculoskeletal conditions, a general term used to describe a group of conditions that affects joints, bones, muscles, and the spine, are recognized as major health burdens on individuals. According to World Health Organization (WHO)
* Musculoskeletal Disorders (MSDs) are excoriations and afflictions that assail body movement of human
* In present days diagnosis of musculoskeletal conditions are dependent on radiographs.
* X-ray image has now become the doctor's eye in determining the broken bones.
* With the improvement, the complexity and small details have also increased.
* In the United States of America in 2009-2010, close to 105 million emergency ambulatory visits to doctors and hospitals for occurrences of musculoskeletal as well as connective tissue disorders were carried out. Of those visits to healthcare facilities, 39 million were seen by main healthcare officials, 32.4 million were seen by surgeons, and 17 million were visited by medical experts in the field [1]. With the availability of good health service and less time to diagnose diseases, and due to limited training and abilities it might lead to inferior radiologist quality. As the amount of work for radiology department increasing, scientist and students have started taking interest in diagnostic assistance using AI and machine learning for better patient monitoring.
* Musculoskeletal abnormalities invade the muscles, tendons, discs, ligaments, bones, nerves, blood vessels etcetera. Global Burden of Disease (GBD) conducted a study in 2016, found that musculoskeletal abnormalities were the second highest exploiter to global disability, and lower back pain. Around 20%-30% people worldwide live with tormenting musculoskeletal abnormalities [1]. Risk of enkindling musculoskeletal abnormalities has stimulated by age, family history, activity level, practicing poor gesture at work, etc. Especially a computer engineer is in a high risk of developing such abnormalities because he or she has to engage with a computer in the same fashion every day.