

Batch No	<b>C7</b>
Project Title	<b>AUTOMATED KNEE DEGENERATIVE ARTHRITIS REPORTS GENERATION THROUGH VISUAL DATA ANALYSIS.</b>

### **ABSTRACT**

Knee degenerative arthritis is a common medical condition that affects the knee joint .Knee Degenerative arthritis causes major disability in patients all over the world. The computerized reporting procedure requires effort and expertise. Manual diagnosis, segmentation of knee joints are still used in clinical practice. Manual diagnosis of this disease involves observing X-ray images of the knee area and classifying it under five grades using the Kellgren – Lawrence (KL) system. Despite the fact that they are time-consuming and sensitive to user variance. As a result, we have the proposed system employing the CNN model with Computer Vision to increase the clinical workflow efficiency and overcome the constraints of the generally used method. We can also implement the report generation system that generates medical reports based on X-ray image features. By extracting the relevant features such as joint space narrowing, and cartilage degeneration, the system generates detailed and objective reports.

***Keywords: Knee Degenerative Arthritis, X-rays, CNN, Computer Vision.***

Guide  
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## **Software Requirements:**

- 1.Programming Language:Python
- 2.Frontend: HTML, CSS, JAVASCRIPT
- 3.Python Libraries
- 4.Open CV
- 5.Operating System:Windows
- 6.Text Editor
- 7.Web Browser

## **Hardware Requirements:**

- 1.Computer or Server
- 2.Storage
- 3.Internet Connection
4. Hard Disk