**DETECTION OF TUBERCULOSIS USING IMAGE ENHANCEMENT AND SEGMENTATION**

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**ABSTRACT**

Tuberculosis (TB) is an airborne infectious disease and a major health threat that is deleterious in most parts of the world. Most of the diagnostic methods are time consuming as well as unreliable and they were all mostly developed in the last century. Chest radiography is used as the most common method for screening TB in a large population. The success of this method depends solely on the experience and interpretation skills of the radiologist. Convolutional neural networks (CNN) are a deep learning strategy that has gained attention and popularity due to its ability to learn midlevel as well as high-level image representations. In this work, several CNN models used as google net model were used, which classifies the chest radiographs into TB positive and TB negative classes. This project offers a comparative study on the various deep learning techniques that can process chest x-rays and are capable of TB detection. The performance of the system is measured on a publicly available dataset: Tuberculosis (TB) Chest X-ray Database.