

## **ABSTRACT**

Breast cancer (BC) is a widespread form of cancer with millions of new diagnoses and deaths each year. In 2020 alone, there were 2.3 million new breast cancer diagnoses and 685,000 deaths. Although mortality rates have declined due to the implementation of regular mammography screening, early detection, and treatment remain important for reducing cancer fatalities. Currently, early detection of BC from radiology images requires the expertise of highly trained radiologists. A looming shortage of radiologists in several countries will likely worsen this problem. Mammography screening also leads to a high incidence of false positive results. Breast Cancer is a type of Cancer that forms in cells of breast. It is the most common cancer among women worldwide, although it can also occur in men, albeit rarely. Breast Cancer can originate from different parts of the breast. Diagnosis of breast cancer involves a combination of imaging tests like mammogram, ultrasound, MRI and biopsy to examine tissue samples for the presence of cancer cells. About 1 in 40 women die due to this cancer. Early Diagnosis plays major role here. This research highlights majorly on mammographic based analysis: Resnet-50. In addition to the model, an algorithm is pertained to model to diagnose the params. With this research, we target in making progress in early breast cancer detection using Resnet-50.

