

## **Abstract**

Breast cancer remains one of the most common cancers affecting women, making early detection through mammography essential for improving patient outcomes. Breast cancer continues to impact millions of women each year. This capstone project shows the different types of breast cancer and their appearance on mammographic imaging. The main focus includes ductal carcinoma in situ, lobular carcinoma in situ, invasive ductal carcinoma, and invasive lobular carcinoma. The display of images demonstrate the main differences within each type of breast cancer. Each type presents with distinct imaging characteristics. This research aims to improve understanding of the various types of breast cancer and emphasize the importance of mammography for early detection and education. Increased awareness of imaging characteristics can lead to earlier detection, improved patient care, and better outcomes. This research also highlights the importance of proper positioning and image quality. The differences between screening and diagnostic mammograms are highlighted within the research and show how important taking care of your health should be.

*Keywords:* detection, breast cancer, increased awareness