

A Review Paper on Brief Study on Breast Cancer Classification using Deep Learning

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Abstract: The biggest cause of cancer-related deaths among women is breast cancer. The greatest and most efficient method to slow the growth of a tumour is early detection and diagnosis. The currently advised imaging technique for the early detection and diagnosis of breast cancer is mammography. Mammogram mass classifications continue to be a major difficulty and are essential for helping radiologists make an accurate diagnosis. The precise detection and classification of breast cancer is a crucial task in medical imaging because of the complexity of breast tissues. Due to their ability to automatically extract characteristics, deep learning techniques have been successfully applied in a wide range of industries, but particularly in the field of medical imaging. In order to identify and classify breast cancer on histopathology images, this research suggests a unique patch-based deep learning technique called Pa-DBN-BC (DBN). To extract features, unsupervised pre-training and supervised fine-tuning phases are performed. The network automatically extracts features from picture patches. To categorise the patches from histopathology images, logistic regression is performed. The model receives the characteristics extracted from the patches as input, and it outputs a probability matrix with either a positive sample (cancer) or a negative sample (background).

Keywords: Deep Learning.

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