Final Project
Abstract

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Breast Cancer is a serious threat and one of the largest causes of death of women throughout the world. The identification of cancer largely depends on digital biomedical photography analysis such as histopathological images by doctors and physicians. Our project aims to classify images between benign, benign without call back and malignant cases. It is very challenging and time-consuming task that relies on the experience of pathologists. The automatic diagnosis of breast cancer by analyzing histopathological images plays a significant role for patients and their prognosis. Deep learning techniques can extract high-level abstract features from images automatically. Normally each image contains structural and statistical information. This project classifies a set of biomedical breast cancer images using CNN techniques guided by structural and statistical information derived from the images. Softmax has been used for the decision-making stage after extracting features utilising the proposed novel CNN models.