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In Collaboration with

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Breast Cancer Early Detection

Ultrasound Images Using ESRGANs & CNN

A dissertation by

Mr. Shane Kanishka

Supervised by

Mr. Iresh Bandara

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Abstract

Breast cancer is one of the biggest problems women face and can survive if they recognize the beginning of the expansion phase. If the patient suspects that the breast lump is growing, the doctor will first ask for an ultrasound report. At this point, you can see if the patient has cancer. It's a valuable solution to survive their lives without wasting time getting lots of reports.

My invention is the detection of cancer cells from ultrasound reports using a more accurate and advanced image processing algorithm. At the moment, I have this idea in healthcare as the medical department needs IT to treat patients immediately. I am thinking of developing a web application that detects breast cancer from ultrasound images of the breast.

Breast cancer is a very popular disease among women around the world. The main problem for women is not to detect the disease early. If they detect the disease early, they can survive the disease. If I feel there is a problem with your chest. First, they guide and ask oncologists and surgeons. They recommend doing an ultrasound to see. After that, the doctor should also perform an ultrasound scan. Then they waste so much time. We would like to reduce this time and develop an application for developing breast cancer detection using ultrasound images. I used ultrasound images for cancer cells detected by SRGAN. SRGAN is a single-frame super-resolution-generating hostile network. You can use the SRGAN technique to produce very accurate output. There are many different methods of machine learning, and the final project will choose the most accurate machine learning method. It's unique, so I'm motivated every time. The Generative Adversarial Network is a very rich machine learning technology bundle due to the large number of technologies. Examples: image generation, video generation, audio generation, etc. To increase the resolution of the image from the breast ultrasound scan image, we chose the ultra-resolution generation hostile network. Breast ultrasound images provide an early warning sign for breast cancer.

Save lives from breast cancer and minimize wasting patient money to get more reports such as mammography and biopsy.

This application helps detect cancer patients in the first move. According to this study, it is a very valuable idea as it can give hope to people's lives. I can imagine how this feeling motivates me to get this job done

.**Keywords: Breast Cancer, Breast Ultrasound, SRGANs, CNN**