Universiti Teknologi MARA

Classification of Breast Cancer using Artificial Neural Network

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ABSTRACT

The project is about the classification of breast cancer using Artificial Neural Network (ANN). Preliminary and early awareness of diseases is crucial, especially a cancer. Cancer is a disease that happened when an abnormal growth of cells spread in the body. It is also known as malignancy. There are more than 100 types of cancer and one of the most awful and leading causes of death is breast cancer. The National Cancer Institute of the US reviews, 232,340 females and 2,240 male cases of breast cancer reported every year and 39,620 death cases. As a precaution, people go through a screening test. Nevertheless, in view of time and cost, the test does not provide an accurate prediction. An additional imaging test with high costs needed to get the most reliable results. Hence, the project aims to develop a classification system for breast cancer, which is cheaper and portable by using machine learning technique called ANN. ANN is successfully used in many areas. In previous, ANN has proven the ability of predicting and classifying with up to 95% accuracy. The method used for the project are the backpropagation ANN. The system will classify the patient whether they have a benign tumor or malignant tumor. As the result, the project shows reasonable accuracy of the ANN approach for breast cancer classification problem.

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