Breast Cancer and Cervical Cancer Detection Using Machine Learning

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Abstract: Women are seriously threatened by breast cancer and cervical cancer with high morbidity and mortality. The lack of robust prognosis models results in difficulty for doctors to prepare a treatment plan that may prolong patient survival time. Hence, the requirement of time is to develop the technique which gives minimum error to increase accuracy. Four algorithms SVM, Logistic Regression, Random Forest and KNN which predict the breast cancer outcome have been compared in the paper using different datasets. All experiments are executed within a simulation environment and conducted in JUPYTER platform. Aim of research categorises in three domains. First domain is prediction of cancer before diagnosis, second domain is prediction of diagnosis and treatment and third domain focuses on outcome during treatment. The proposed work can be used to predict the outcome of different technique and suitable technique can be used depending upon requirement. This research is carried out to predict the accuracy. The future research can be carried out to predict the other different parameters and breast cancer and cervical cancer research can be categorises on basis of other parameters.

Keywords: Breast Cancer, Cervical cancer, machine learning, feature selection, classification, prediction, KNN, Random Forest, ROC, etc.

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BIOGRAPHY

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