

عنوان مقاله:

Breast cancer detection using machine learning algorithms

محل انتشار:

فصلنامه بین المللی تحقیقات در مهندسی صنایع, دوره 9, شماره 3 (سال: 1399)

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خلاصه مقاله:

Breast cancer has been the riskiest malignancy among ladies around the world. Nearly ۲ million new cases were diagnosed in ۲۰۱۸. The main problem in the detection of breast cancer is to find how tumors turn into malignant or benign and we can do this with the help of machine learning techniques as they provide an appropriate result. According to research, an experienced physician can diagnose cancer with ۷۹% accuracy while using machine learning techniques provides an accuracy of ۹۱%. In this work, machine learning techniques have been applied which include K-Nearest Neighbors algorithm (KNN), Support Vector Machine (SVM), and Decision Tree Classifier (DT). To predict whether the cause is benign or malignant we have used the breast cancer dataset. The SVM classifier gives more accurate and precise results as compared to others, and this classifier is trained with the larger datasets.

کلمات کلیدی:

Machine Learning, K-Nearest Neighbors, Support Vector Machine, Decision Tree Classifier, Jupyter

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