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Framework for the Development of a Tumor Cancer Detection System

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Abstract: Image Processing plays an important role in various fields such as clinical imaging, surveillance and surgical, etc. The purpose of the system is to build a proposed framework for the development of a tumor cancer detection system, that is, to determine whether a person has harmful or non-harmful tumor growth using Machine Learning Algorithms. The python-based structure was developed using CNN, KNN and SVM for Tumor detection and classification. The Support Vector Machine has been used in the proposed structure which works to reduce the basic risk to image separation. The proposed plan presents a CNN model and SVM-based Image Processing, which separates images and the system can check whether a patient's collected image is malignant or harmless tumor and blurring.

Keywords: Image processing, Support Vector Machine (SVM), MRI images, Convolutional Neural Network (CNN), K-Nearest Neighbour (KNN), etc.

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