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Efficient MRI Segmentation and Detection of Brain Tumour using CNN

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Abstract: Image/Object detection is essential in numerous industries, such as medical imaging, aerial surveillance, the best manipulation and analysis, surgical microscopes, etc. This system's objective is to provide a benchmark for the identification and classification of brain tumours, specifically to determine using the SVM algorithm whether a tumour is cancerous or not. ANNs that apply empirical risk minimization are already widely employed to detect things. We are using the Support Vector Machine method to classify the images, which depends on structural risk minimization. Tumour extraction from medical images is performed using the SVM technique, and the tumour classification function is implemented using a Python-based system. The training dataset was used to test CNN approaches.

Keywords: CNN, Brain, Tumor, SVM

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