**Ministry Of Higher Education & Scientific Research**

**University Of Qadisiyah**

**College Of Computer Science & Information Technology**

**Computer Section**

# Tumor Detection Of MRI Image

A report submitted to the department computer science of the requirements for obtaining a bachelor's degree in computer science and information technology / computer department

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بِسْـــمِ اللَّهِ الرَّحْمَنِ الرَّحِيــمِ

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

صدق اللهُ العلي العظيم

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# Abstract

Medical image processing is the most challenging and emerging field now a day. Processing of MRI images is one of the part of this field. This paper describes the proposed strategy to detect & extraction of brain tumor from patient's MRI scan images of the brain. This method incorporates with some noise removal functions, segmentation and morphological operations which are the basic concepts of image processing. Detection and extraction of tumor from MRI scan images of the brain is done by using MATLAB software. In this project, the resulting images of the brain magnetic resonance imaging system are also used to determine the area of the tumor in the brain. the steps begin with the initial processing of the image by converting it to a binary image and then the images are cut into equal sections, and the confusion coefficients are found between these sections. we continue this process until the approximate tumor location is determined. the location of the tumor is approximate, with varying operational time for the method used for this purpose. the success ratio of these images was about 97% when using the single value decomposition (SVD) algorithm.

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