

Methodology for the Registration of Images and their Inclusion in Medica Image Management Systems, Based on the DICOM Protocol

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Abstract

Nowadays, information is being generated that can be considered as necessary for a medical evaluation, in this sense, it is necessary that this information can be registered in the different information systems that are used in the medical environment; In this work, we describe a method to convert images in conventional format such as PNG, BMP, JPG, among others, to the DICOM format, which is the standard format for the use and manipulation of medical images for use in medical imaging, to demonstrate the method we use the Matlab programming language as a programming tool, the results show that the images generated can be stored in PACS systems, which can be integrated into computer systems for clinical use. We conclude that the method can be scalable to different types of images that can be exploited in the medical field.

Keywords

Medical image, protocol, DICOM, Protocol and processing.

1. Introduction

Currently, technological progress is causing the generation of information, the health area is no exception, where applications are developed that record signals and images, in a review of the state of the art, we find works where applications are developed related to the registration of vaccines for different types of diseases as is the case of those dedicated to the pandemic by Covid-19 [1]. Also in the care of children there are vaccination programs, in most countries, in order to control these processes there are applications where they are responsible for controlling the children who access vaccination programs [2].

When developing devices for recording medical signals, one of the main functions is that which is responsible for sending the signals, its proper use and application ensures the integrity of the signal

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