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A COMPREHENSIVE REVIEW OF IMAGE ENHANCEMENT AND VEDIC MATHEMATICAL TECHNIQUES

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Abstract

The principle object of Image enhancement technique is to improve the characteristics or quality of an image such that the resulting image is better than the original image for specific application. Digital image enhancement techniques provide a multitude of choices of improving the visual quality of images. Image Enhancement processes consists of a collection of techniques that seek to improve the visual appearance of an image or to convert the image to a form better suited for analysis by a human or machine. Many images such as medical images, remote sensing images, electron microscopy images and even real life photographic pictures suffer from poor contrast. Therefore it is necessary to enhance the contrast. Enhanced image provide clear image to eyes or assist feature extraction processing in computer vision system. In image and signal processing applications multiplication is major concern in calculations. Performing multiplication by conventional mathematics is a long course of action and requires huge quantity of processing time. Vedic mathematics is the ancient system of mathematics which has a unique technique of calculations based on sixteen sutras. In this paper, we will provide an overview of Image enhancement and processing techniques and Vedic mathematical techniques.

Key Words : *Image enhancement, Digital image processing, Filters, Gray scale manipulation, Vedic mathematics, Urdhava Triyakbhyam sutra, Nikhilam sutra.*