ABSTRACT

Fuzzy set theory is the extension of conventional set theory. Fuzziness quantifies vagueness and ambiguity, as opposed to crisp memberships. Fuzzy stage processing is an attempt to translate the ability of human reasoning into computer vision problem as it provides an intuitive tool for inference from imperfect data. It gives a new methodology augmenting classical logic, a component of any computer vision tool. Glaucoma is an eye disease caused by elevated intra-ocular pressure. This elevated pressure destroys the optic nerve. This causes enlargement (or) deepening of optic cup and loss of vision.

Aim of our project is to detect the glaucoma in Retinal Images. The project detects the presence of glaucoma by using color fundus image through the computer screening. In automated method the input of a person by fundus camera. The captured image is subjected to various preprocessing steps like gray level transformation, median filtering and mathematical morphology. Image processing capabilities of MAT LAB are used extensively to accurately detect presence of Glaucoma in the eye. The result shows the decision support system in medical staff with accurate and reliable diagnosis of glaucoma with good prediction percentage of 98%. A new type of image understanding and treatment has to be developed. This paper proposes a programmed identification procedure of Glaucoma by extracting a part of eye sclera to keep the danger of causing a noteworthy harm. The Fuzzy image has become one of the most fundamental tools for both clinical research and sickness diagnosis.