ABSTRACT

Iridology is knowledge and practice that can give expression to body condition based on the analysis of iris structure. The disturbance disease of body network will be informed by fiber nerve to brain. Information of this energy wave will be emission by brain to eye, recorded and fixed to the iris. Then, this record fixation to be data trails that can be detected in connection with disturbance/disease attack body.

The research of this computerized iridology using Wavelet Decomposition for extraction process. It can found the pattern of data and also make data compression by decrease of dimension without many lose information. Besides that, this research also using Support Vector Machine for image recognition and classification.

In this research, detection of kidney condition is designed by image acquisition state, grayscale, segmentation, extraction texture variation, and recognition. The input of this system is sample iris of patient that gives indicating of state condition, normal, acute, sub acute, cronies, and degenerative. The test does with program simulation using Matlab R2007b this system can detect disease quickly and the accuracy of this system is 97.5% using Su8pport Vector Machine.

Keyword: Iridology, Wavelet Decomposition, Support Vector Machine (SVM)