ABSTRACT

RECONSTRUCTION OF ECG SIGNAL FROM 2 DIMENSION ECG SIGNAL IMAGE TO 1 DIMENSION ECG SIGNAL GRAPHIC

By

Reza Dwi Permana

Electrocardiography (ECG) is an important tool that can print the human heart's work to papers. ECG paper used to identifing the human heart's condition. Complexity of conventional ECG readings and storage ECG record are earn the attention of researchers to carry out rocord of ECG signal on the paper to digitalization. ECG signal digitization is expected to help doctor or medical student when reading, identifing heart disease, and storing medical records of heart disease patient. This study will create a software that can digitizing the ECG signal using a simple image processing with Matlab application software. The simple image processing is like contrast and brightness, grayscale, and processing data into a signal graphic. By observation, the sistem could created a graphic signal of ECG as same as the original signal image in the paper of ECG.

Key words : Electrocardiograph (ECG), digitization, image processing, contrast, brightness, reconstruction.