Thesis Title	ECG Data Compression Using Wavelet Transform
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ABSTRACT

A personal computer ECG recording system for the long time diagosis comsumes a large size of area for recording. Using the efficiently of the limited storage device, it is necessary to compress the ECG data before recording. This thesis proposes the ECG Data Compression Using Wavelet Transform. In the method, the orignal data is decomposed into a set of independent sub-data. Consequently, prior to the traditional Huffman Coding, after the Quantization process the efficiency of the system can be increased by the Run-Length Coding and the Histogram Circular Shifting. The compression performance of Wavelet Transform indicated by Compression Ratio (CR), Percent Root-mean-square Difference (PRD) and signal comparison is resulted by Matlab®. By doctors' suggestions it can be concluded that by Coiflet-3, CR = 6 that makes PRD in a range of 3-5 % is the practical condition.