



Faculty of Mathematics and Informatics
Department of Information Technologies
MSc Program: Bio- medical Informatics

S U M M A R Y

of diplom work

Theme: *Developing of information web- site – “Analysis of heart working with electrocardiographical method”*

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Key words: information technologies, information web-site, biomedical researches, medical diagnostics, heart (heart-vessels diseases), electrocardiography, electrocardiogram, computer based medical systems for electrocardiography, teaching, information service, health information.

A short annotation of the work:

The analysis of electric activity of heart – electrocardiography, is most widespread in medical practice. The electrocardiography shows electric effects in the heart, which are observed on different body parts. The electrocardiography shows the depolarization and repolarization of the heart during the heart cycle and the distribution of the stimulative wave.

The diplom work has the purpose to make an INTERNET instrument on Bulgarian language, which can make easy the process of studying the cardiac activity by understanding the electrocardiogram. In this way it is shown how with the help of information technologies we can help the creation of practical ability for correct interpretation of electrocardiography like a diagnostical method and to pay attention to the basic special features when interpretating of the electrocardiogram in the daily physician’s practice. We tried to make a short practical preview of the electrocardiographical method. The main purpose is to make easy the process of learning of heart problems by deciphering electrocardiograms.

The main task of diplom work is to create and develop a teaching web- site with simple visual approach to the acquiring of knowledge, which is necessary for the deciphering and interpretating an electrocardiography step by step. The web-site will be valued for students and experts in medicine with little knowledge about electrocardiography and for everyone who is interested in electrocardiography.

The development of internet based medical application in the sphere of electrocardiography makes the narrow relationship between medical diagnostic and information technologies solid.