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Physiological signals automated analysis system based on Virtual Instruments

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The main aim of the research is to increase the informativities of the cardiovascular system automated analysis and to develop the virtual laboratory for support education in the field of biomedical engineering.

The research has proceeded in two directions: (1) cardiovascular system automated analysis based on Virtual Instruments; (2) remote physiological signal acquisition in the framework of E-learning for education in the field of biomedical engineering.

The research direction (1.) is concerned with processing of signals collected of the remote ECG and 24-hours heart rate signals based on Virtual Instruments. For software development we are using NI LabVIEW software.

The research direction (2.) is concerned with development the E-learning virtual laboratory with remote physiological signal acquisition.

[1] V. Cidelko, M. Chegovoy, O. Kyselova, A. Matviichuk. Innovative technologies in the laboratory training on the course "Information-measuring complexes" // Eastern-European Journal of Enterprise Technologies. - 2014. - № 3(9). - P. 47-50.