

Abstract

Biomedical signals like Electrocardiogram (ECG/EKG), Electroencephalogram (EEG), Electromyogram (EMG) are important from clinical point of view.

On going research work in the field of signal processing of biomedical signals is already going on. This has inspired the author to work in direction of biomedical signal processing including filtering, compression and detection. This research work can provide better alternatives for biomedical signal processing. Computerized processing of biomedical signals can help in developing biomedical signal analysis systems for clinical use as well as for medical students.

The thesis includes development and implementation of architectures of ANN models employing supervised as well as unsupervised training/learning algorithms for the basic signal processing tasks such as filtering, compression, and detection. The software environment is developed using MATLAB 6.5. A user friendly interface is developed which allows user to interact easily.