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(57) Abstract :

The present invention discloses an apparatus for measurement of RR intervals and a system thereof. The apparatus comprises a control unit, a data acquisition module, a data enhancement module, a storage module, a feature extraction and data interpretation module, classification and predictor module and a communication module. The apparatus is used by the user to monitor and interpret electrical activity of heart and estimate RR intervals through at least plurality of sensor connected therein. The data acquisition module receives the electrical activity occurred in heart and digitize observed electrical activity into digital vector. The data enhancement module checks the inconsistencies and acquisition errors if any in digital heart beat vector. It also enhances vector so that prominent discriminative features can be extracted. The feature extraction and data interpretation module generates feature vector of digital heart beat vector and computes the RR intervals based on the attributes. The classification and predictor module classify the state of enroller under observation (normal, moderate, abnormal) based on RR intervals, predict disorders caused on the basis of RR intervals, estimates risk factors involved. The communication module shares the data files to any remote compatible devices such as smart phones, computers, and tablet but not limited to.

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