

Web Site on Heart Rate Variability: Hrv-Site

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Heart rate variability (HRV) is an easily measurable physiological indicator that has important clinical applications. The autonomic nervous systems modulates the heart rhythm and then HRV is a good non invasive tool for evaluating diseases that affect this nervous systems, such as myocardial infarction, diabetes,... The main problem for HRV researchers is the lack of common data collections that could be used for testing their own algorithms. Moreover, free software tools for analyzing ECG records are scarce or they do not exist. Inspired by the PhysioNet Website (<http://www.physionet.org>), we have developed a Web portal, HRV-Site, located at <http://www.hrv-site.net>, and devoted to the HRV, taking into account aspects such as related papers, software, or datasets. Heart rate records included in HRV-Site are ASCII files freely and publicly accessible. We offer some additional information like age, sex or medical treatment and diagnosis. Some of them correspond to heart rate data obtained from Physionet ECG records. Another functionality provided by our Web portal is the possibility of performing online HRV analysis, employing our R-HRV software package, a plug-in for the open source statistical environment R, which can be freely downloaded from the R-CRAN repository. Users only need a web browser to use this tool and they can analyze either an heart rate record stored on the HRV-Site database, or analyze his/her proper record, stored in his/her own computer. HRV-Site is also aimed at maintaining updated documentation of both methodology and clinical applications of HRV, offering the researchers the possibility of building a growing HRV community, by forming discussion groups and adding news or advertisement. Currently, HRV-Site includes a collection of approximately 100 heart rate records, and provides information of more than 100 documents including scientific articles, books, and tutorials.