

An Android Application for ECG Monitoring and Evaluation Using Pan-Tompkins Algorithm

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Abstract : Parallel to the fast worldwide increase of elderly population and spreading unhealthy life habits, there is a significant rise in the number of patients and health problems. The supervision of people who have health problems and oversight in detection of people who have potential risks, bring a considerable cost to health system and increase workload of physician. To provide an efficient solution to this problem, in the recent years mobile applications have shown their potential for wide usage in health monitoring. In this paper we present an Android mobile application that records and evaluates ECG signal using Pan-Tompkins algorithm for QRS detection. The application model includes an alarm mechanism that is proposed to be used for sending message including abnormality information and location information to health supervisor.

Keywords : Android mobile application, ECG monitoring, QRS detection, Pan-Tompkins Algorithm

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