

HEART RATE PREDICTION WITHOUT USING PHYSICAL DEVICES

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ABSTRACT

Heart Rate (HR) is one of the foremost necessary Physiological parameters and a vital indicator of people's state and is thus important to watch. Monitoring of unit of time typically involves high prices and sophisticated application of sensing elements and sensor systems. Analysis progressing throughout the last decade focuses additional on noncontact primarily based systems that area unit straightforward, low-priced, and simple to use. This project presents a true time unit of time watching methodology employing a digital camera of a laptop or a computer. The center rate is obtained through facial colour variation caused by blood circulation. Three totally different signal process ways like quick Fourier remodel (FFT), freelance element Analysis (ICA), and Principal element Analysis (PCA) is applied on the colour channels and compared to corresponding reference measurements.

KEYWORDS: *Quick Fourier Remodels (FFT), Principal Element Analysis (PCA), Freelance Element Analysis (ICA), Heart Rate, Region of Interest (ROI), Red, Green and Blue (RGB)*

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