

A Literature Review on Emotion Recognition Using Wireless Body Area Network

Authors : Christodoulou Christos, Politis Anastasios

Abstract : The utilization of Wireless Body Area Network (WBAN) is experiencing a notable surge in popularity as a result of its widespread implementation in the field of smart health. WBANs utilize small sensors implanted within the human body to monitor and record physiological indicators. These sensors transmit the collected data to hospitals and healthcare facilities through designated access points. Bio-sensors exhibit a diverse array of shapes and sizes, and their deployment can be tailored to the condition of the individual. Multiple sensors may be strategically placed within, on, or around the human body to effectively observe, record, and transmit essential physiological indicators. These measurements serve as a basis for subsequent analysis, evaluation, and therapeutic interventions. In conjunction with physical health concerns, numerous smartwatches are engineered to employ artificial intelligence techniques for the purpose of detecting mental health conditions such as depression and anxiety. The utilization of smartwatches serves as a secure and cost-effective solution for monitoring mental health. Physiological signals are widely regarded as a highly dependable method for the recognition of emotions due to the inherent inability of individuals to deliberately influence them over extended periods of time. The techniques that WBANs employ to recognize emotions are thoroughly examined in this article.

Keywords : emotion recognition, wireless body area network, WBAN, ERC, wearable devices, psychological signals, emotion, smart-watch, prediction

Conference Title : ICNCS 2024 : International Conference on Network and Computer Science

Conference Location : Santorini, Greece

Conference Dates : July 11-12, 2024