



Retrieving Multiple Patient Information by Using the Virtual MIMO and Path Beacon in Wireless Body Area Network

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Abstract

The wireless body area network (WBAN) is the developing technology which is used to monitor the patient's activities. The main challenges in the WBAN are Qos, Energy consumption during the information transformation, Delay and security. Thus the paper contributes the proposed method which is used to manage the above challenges. Initially the node has been placed on the human body which is configured with the mobile devices for transmitting the information. The priority of the information is decided by the node or sensor placement by default head and heart sensors. Then the information is forwarded to the nearest remedy subscribed base station through cluster heads by using the virtual MIMO method. This method uses the opportunistic approach to minimize the decision making time of the priority and the transmission queueing process. The proposed system used to combine the two or more priority information with the help of the ACK time and PATH BEACON that utilizes the maximum bandwidth to forward the information without making the collision and delay.

Keywords Wireless body area network · Remedy subscribed base station · Virtual MIMO method · Opportunistic approach · ACK time and PATH BEACON

1 Introduction

Wireless body area network (WBAN) is also called as the body area network which is one of the wearable computing devices that is used to increase the human regular lifespan and reduces the health cost in many health care centers [1]. The WBAN devices are embedded in the human body with a fixed position technology or different position wearable technology such as clothes pockets, hand, watches, bag, head, and heart that is used to minimize the particular networks, devices, energy and so on [2]. The main use of the WBAN is medical monitoring which offers the flexible services also minimize the cost in terms of

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