# Dynamic Connectivity Establishment and Cooperative Scheduling for QoS Aware Wireless Body Area Networks

#### ABSTRACT

- To address the connectivity problem and provide Quality of Services in the network, we propose a dynamic connectivity establishment and cooperative scheduling scheme, which minimizes the packet delivery delay and maximizes the network throughput.
- First, to secure the reliable connectivity among WBANs and APs dynamically, we formulate a selection parameter using a price-based approach.
  Thereafter, we formulate a utility function for the WBANs to offer QoS using a coalition game-theoretic approach.

#### **EXISTING SYSTEM**

- In a hospital environment, the total number of Wireless Body Area Network equipped patients requesting ubiquitous healthcare services in an area increases significantly.
- Therefore, increased traffic load and group-based mobility of WBANs degrades the performance of each WBAN significantly, concerning service delay and network throughput.
- In addition, the mobility of WBANs affects connectivity between a WBAN and an Access Point dynamically, which affects the variation in link quality significantly.

#### **PROPOSED SYSTEM**

- We study the performance of the proposed approach holistically, based on different network parameters.
- Finally, critical WBANs in the proximity of an AP form coalitions to ensure QoS between them. In each coalition, the WBANs participate in cooperative packet scheduling to provide services to the critical WBANs.
- For handling cooperation between WBANs, we proposed another algorithm Optimal Cooperative Packet Scheduling.

## HARDWARE REQUIREMENTS Intel core i3 • Processor • RAM - 2B Hard Disk - 20 GB •

### SOFTWARE REQUIREMENTS

- Operating System : LINUX
- Tool : Network Simulator-2

• Front End : OTCL (Object Oriented Tool Command Language)

#### REFERENCE

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