**Energy Efficient MAC Protocol with Fair-Scheduling Technique in Multi-hop MANETs**

Venkata Ravi Shankar Challa(U00901794)

The paper discusses MANET as one of the communication networks .The main issue of paper is , a network should be able to maintain queues stable and enhance network throughput ,while still meeting the QoS requirements. Fair scheduling technique proposed for scheduling flows in MANETs is good in solving the above mentioned issue.

The authors proposed the technique ,which is a hybrid version of all the other algorithms and will have more features when compared to other normal techniques. They succeeded in proving ,how the proposed algorithm come to be true ,using graph, functions and with mathematical calculations. But, the authors failed to clearly explain how a retransmit occurs, i.e., when a packet has to be retransmitted more than once, in what way and how retransmits are spaced. The theorems and proofs given in the paper clarify the paper’s claim but not completely and specifically. It might be observed that, authors have wavering thoughts and started proposing many techniques. Anyhow, the paper has a strong technical perspective ,which defends the proposed algorithm. To simulate the proposed architecture , authors have used NS2 and the results obtained in this simulation are compared against a standard technique OSFRA. The simulation ,which was done using NS2 software ,shows that the proposed algorithm does what it meant to be and definitely suits the raising needs in the network world .

From English language perspective, English used in paper is clear and concise ,with no spelling mistakes. The key terms are well defined , in the paper which helps for easy understanding of context and concept in it. I believe, authors must have taken lot of care ,for making the keywords explicitly understood.

To conclude, I feel that , authors have made solid foundation work in the area of computer networks by designing algorithms which can be used in implementation of differentiating and scheduling data packets, based on the type of the flow (inelastic flow, elastic flow). The sole improvement I suggest to this paper is, in the issue of packet re-transmission and issue of packet loss. It can be concluded from this paper, that inelastic flow can be sorted, prioritized and scheduled as per delay field in utility function. Finally, the paper is good in improving the real world computer science techniques.