Abstract

Congestion in wireless sensor network (WSN) is one of the critical problems still from its evolution. Congestion in WSN can be a severe problem, as it causes plethora of malfunctions such as packet loss, lower throughput, energy efficiency, increase in collisions, increase in queuing delay and decreased network lifetime. As a result, the performance of the whole network is subject to undesirable and unpredictable changes. WSN performance control can be
carried out by robust Congestion control approaches that aim to keep the network operational under varying network conditions. The potential paradigms of soft computing highly addressed their adaptability and compatibility to overwhelm the complex challenges in WSNs. This paper presents a comprehensive survey on classical and soft computing based congestion control mechanisms. In addition, a detailed comparison along with revealing their merits and demerits is presented. This work could bestow the researchers to come up with a broader and efficient approach to tackle the inherent problems of congestion in WSN.

References


Index Terms

Computer Science Wireless Networks

Keywords