Abstract

WMSN is definitely a special type of WSN which will good sense and move scalar data in addition to multi-media data, which is, impression, audio, and online video revenues, within real-time in addition to non-real-time. In WMSN, the goal is to send information from a source to a destination node in peer-to-peer connection through intermediate mobile nodes, i.e., across multiple hops. In this paper, a novel metaheuristic technique i.e., triangular mutation based particle swarm optimization is proposed to detect attacks in wireless multimedia networks. The performance of the original Triangle link quality metric and minimum inter-path Interference based Geographic Multipath Routing (TIGMR) protocol based geographic multipath routing is compared with this new implemented approach, called here as An Ad Hoc On-Demand Distance Vector (AODV)-PSO. Two metrics were used to evaluate the performance of the algorithm: Bit Error Rate. We observed that the AODV-PSO outperformed the original AODV protocol in the scenarios studied in this paper.


27th Canadian Conference on Electrical and Computer Engineering (CCECE ’14), pp. 1–5, Toronto, Canada, May 2014.


Index Terms

Computer Science Security

Keywords

Wireless Multimedia Sensor Network, Triangular Mutation based Particle Swarm optimization (PSO and AODV routing protocol.)