Abstract

Wireless Sensor Network (WSN) has been identified as one of the most important emerging technologies for the 21st century to monitor environments, and have a lot of applications include warfare, smart homes and rescue. This paper presents an insight to the wireless sensor networks using CSMA-based media access control protocol (MAC) with various performance measures to evaluate the efficacy of the model. We use MATLAB based PROWLER to design our simulated WSN model with Normal Radio Model, Radio Model with SINR, and Radio Model using Rayleigh Fading for Spanning tree and geographical angle based routing. The simulation results show that the simulator under valuation can effectively approximate the behavior of WSN in terms of a number of packet sent and received and detected collisions.
Reference


Index Terms

Computer Science  Wireless
### Key words

<table>
<thead>
<tr>
<th>Wireless sensor networks</th>
<th>radio channel</th>
<th>routing</th>
</tr>
</thead>
</table>