Abstract

In this research paper an algorithm is generated named Adaptive Data Size Compressed Algorithm (ADSCA) in wireless sensor network. This algorithm depends on the binary numbers and the hash function. Binary numbers are using for compress data length or data size with the help of ASCII code and hash function is also used to compress the data size without losing information. After that the electromagnetic waves are used for data transmission from one node to another node. Then it is analyzed that how much minimum energy should be used in data transmission from source to destination through the electromagnetic waves. For the security purpose two techniques are applying, one is RSA algorithm and other is Diffie-Hellman algorithm. The latest routing protocol for sending the information is AOMDV, which is an extension version of AODV protocol. With the help of this routing protocol and security techniques, a secure route and minimum numbers of hop counts are find out from source to destination for sending the information data. At last MATLAB represents the data transmission from source to destination is dynamically showing in GUI (Graphical User Interface). This GUI is
created a wireless sensor network, where some sensor nodes are deployed.

References


Index Terms

Computer Science Wireless

Keywords
ADSCA, RSA, WSN, AOMDV protocol, Diffie-Hellman algorithm, Hashing, Binary code, ASCII code, Security, MATLAB.