



Republic of Iraq
*Ministry of Higher Education and
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University of Babylon
College of Information Technology



Modeling the message alternative routes in large scale wireless network

A Project

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Prepared by

Abdullah Ali Salim

Supervised by

Assistant Lecturer Sundos Firas

Abstract

One of the most common methods for relaying messages in a variety of networks is the shortest path. In terms of energy and time, it provides an effective message relaying to the destination through many nodes. The shortest hop or distance path can be constructed using a variety of algorithms. However, no algorithm for building a shortest hop multipath for wireless sensor networks (WSNs) has yet been proposed in the literature. This paper proposed a distributed shortest hop multipath algorithm for WSNs. An alternative approach is suggested as a path in the case of allocating certain node on another path at the same time to avoid the busy path. This case to solve the simultaneous data dissemination or routing messages from different nodes to a sink. This paper reduces the problem of losing the messages when there are common nodes on different paths at the same time. The proposed algorithm produces multi alternative paths with the fewest hops to ensure network load balancing.