Analysis of Behavioral Characteristics of Jammers to Detect Malicious Nodes in Mobile ADHOC Networks

A Main Project Abstract

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By

S. B. Mukesh (19481A05M9)

Thabassum (19481A05N3)

V. Mohan Sai (20485A0523)

V. Manoj (19481A05O6)

Under the guidance of
Dr. Y. Adilakshmi, M. Tech, Ph.D
Professor, Department of CSE

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SESHADRI RAO
GUDLAVALLERU ENGINEERING COLLEGE
(An Autonomous Institute Permanently affiliated to JNTUK)
Seshadri Rao Knowledge Village
GUDLAVALLERU – 521356
ANDHRA PRADESH

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ABSTRACT

Wireless ADHOC Networks are used to establish a wireless connection between two computing devices without the need for a Wi-Fi access point or router. This network is decentralized and uses omnidirectional communication media, which makes it more vulnerable to certain types of attacks compared to wired networks. Jamming attacks, a subset of denial-of-service (DoS) attacks, involve malicious nodes that intentionally interfere with the network, blocking legitimate communication. To address this issue, the proposed method analyzes various characteristics of nodes, such as packets sent, received, and dropped, at each node. Using the packet delivery ratio and packet drop ratio, the method detects jamming nodes from normal nodes, improving network performance. The network is simulated in NS2 environment.

Team Members

19481A05M9

Project Guide

19481A05N3

(**Dr. Y. Adilakshmi**)

20485A0523

19481A05O6