A HMM improved Neighbor Node Analysis Approach in Mobile Network

Abstract

Security is one of the challenging issue for Mobile network because of its public access nature. Blackhole is the common threat in this network that capture the communication between nodes and disturb the communication network. In this work, a blackhole preventive routing scheme is presented. The work as defined a two layered analysis to identify the blackhole node and to generate the effective path. In first layer, the long term statistical information is analyzed to identify the trustfulness of node. Once the information is collected, the HMM approach is applied to identify the effective neighbor. The work is implemented in NS2 environment. The results shows that the work has improved the network throughput and decreased the communication loss and delay.

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