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# Cost-Aware SEcure Routing (CASER) Protocol Design for Wireless Sensor Networks

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## MODULE 1:

Wireless topology of creation of **simple packet transmission between nodes** with default node configurations.

### *Flow of Implementation:*

*TCL Script, Default configurations of wireless, DSR protocol, NAM window.*

## EXISTING MECHANISM (PAPERS EXISTING METHOD)

## MODULE 2:

wireless sensor network topology of creation of **more number of nodes [50nodes]** with default node configurations and packet transmission will be done based on NORMAL DSR SCHEME [DYNAMIC SOURCE ROUTING] and **QOS performance metrics like end to end delay, energy spent, packet delivery ratio, throughput** values are taken and graphs will be plotted in **xgraph**.

### *Flow of Implementation:*

*TCL Script, Default configurations of wireless, DSR protocol, NAM window, awk file execution, graph plot.*

## MODULE 3:

wireless sensor network topology of creation of **more number of nodes [50nodes]** with default node configurations and packet transmission will be done based on PROPOSED DSR SCHEME [DYNAMIC SOURCE ROUTING] and **JAMMERS are introduced in the network to check the network performance** where as **QOS performance metrics like end to end delay, energy spent, packet delivery ratio, throughput** values are taken and graphs will be plotted in **xgraph** JAMMERS will minimize the network life time and **packet drops can be seen in NAM** so performance of the network gets degraded.

### *Flow of Implementation:*

*TCL Script, Default configurations of wireless, procedure written for JAMMERS, DSR protocol, NAM window, awk file execution, graph plot.*

## PROPOSED MECHANISM (PAPERS PROPOSED METHOD)

### MODULE 4:

wireless sensor network topology of creation of more number of nodes [50 nodes] with default node configurations and packet transmission will be done based on PROPOSED PROTOCOL COST AWARE SECURE ROUTING MECHANISM CASER PROTOCOL which is developed in c++ and integrated in to NS2 package and JAMMERS are introduced in the network to check the network performance where as QOS performance metrics like end to end delay, energy spent, packet delivery ratio, throughput values are taken and graphs will be plotted in xgraph. Here JAMMERS will be detected and prevented so that the network life time, performance will get increased.

#### *Flow of Implementation:*

*TCL Script, Default configurations of wireless, procedure written for JAMMERS, procedure for CASER scheme, PROPOSED CASER protocol, NAM window, awk file execution, graph plot.*

### MODULE 5:

Comparison of the existing (NORMAL DSR PROTOCOL) JAMMERS and proposed (PROPOSED CASER PROTOCOL) mechanisms with single trace file and graphs execution.

#### *Flow of Implementation:*

*User generated trace files, graph plot.*