**A SECURE INTRUSION DETECTION SYSTEM AGAINST DDOS ATTACK IN**

**WIRELESS MOBILE AD-HOC NETWORK**

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**Abstract -**

Wireless Mobile ad hoc network is an emerging technology and have great strength to be applied in critical situations like battlefields and commercial applications such as building, traffic surveillance, MANET is infrastructure less, with no any centralized controller exist and also, each node contains routing capability, each device in a MANET is independently free to move in any direction, and will therefore change its connections to other devices frequently So one of the major challenges wireless mobile ad hoc networks face today is security, because no central controller exists. MANETs are a kind of wireless ad hoc networks that usually has a routable networking environment on top of a link layer ad hoc network Ad hoc also contains wireless sensor network so the problems are facing by sensor network is also faced by MANET While developing the sensor nodes in unattended environment increases the chances of various attacks There are many security attacks in MANET and DDoS (Distributed denial of service) is one of them Our main aim is seeing the effect of DDoS in routing load, packet drop rate, end to end delay i.e., Maximizing due to attack on network and with these parameters and many more also, we build secure IDS to detect this kind of attack and block it Using Rate Limiting and Traffic Filtering Algorithm which Limits the rate of incoming traffic and filtering packets based on predefined criteria can help prevent DDoS attacks from overwhelming the network.

***Keywords:*** *Wireless Mobile ad hoc network (MANET), Distribution denial of service (DDOS), Intrusion detection system (IDS),*