

## **An Intelligent Model for Mitigating the Attack Effects**

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***Abstract** - IP spoofing enables the network attackers to hide their identity while the IP traceback allows victim to identify the origin of attackers. Many IP traceback techniques are suggested such as ICMP trace messages, Probabilistic Packet Marking, Hash-based IP Traceback, etc.*

*The aim of this work is to present an Intelligent Packet Filtering for defending against both the network Denial of Service (DOS) and Distributed Denial of Service (DDoS) attacks. In addition, the proposed model introduces active response mechanism for taking rapid action against attacker. This work is motivated by the increased frequency and sophistication of denial-of-service attacks and by the difficulty in tracing packets with incorrect, or "spoofed", source addresses. Also, this paper presents within the proposed model a tracing approach based on the packet marking.*

***Keywords:** Network Threats, IP Spoofing, IP Traceback, and Probabilistic Packet Marking;*