

## ABSTRACT

In this thesis, I propose a framework for intrusion detection system over TCP/IP network. The key idea is to use soft computing for detecting intrusive behaviors and Denial of Service attacks (DoS). The basic intent of a DoS attack either overwhelms the resources allocated by a networked device to a particular service in order to prevent its use, or to crash a target device or system. This will cause disaster in network environment. To protect the most valuable possession from these malicious attempts is so essential. Fuzzy rule-based has been introduced to implement intrusion detection system in this framework. The experimental results reveal that the proposed framework yields the better result of detection than traditional threshold-based detection.

