A STUDY OF FEATURE SELECTION METHODS IN INTRUSION DETECTION SYSTEM: A SURVEY

AMRITA & **P AHMED**

Department of CSE, Sharda University, Greater Noida, India

ABSTRACT

Nowadays, detection of security threats, commonly referred to as intrusion, has become a very important and critical issue in network, data and information security. Therefore, an intrusion detection system (IDS) has become a very essential component in computer or network security. Prevention of such intrusions entirely depends on detection capability of Intrusion Detection System (IDS). As network speed becomes faster, there is an emerge need for IDS to be lightweight with high detection rates. Therefore, many feature selection approaches/methods are proposed in the literature. There are three broad categories of approaches for selecting good feature subset as *filter, wrapper* and *hybrid* approach. The aim of this paper is to present a survey of various feature selection methods for IDS on KDD CUP'99 bench mark dataset based on these three categories and different evaluation criteria.

KEYWORDS : Feature selection, intrusion detection systems, filter method, wrapper method, hybrid method.