

A Project Report on

**Network Traffic Monitoring with Attack and Intrusion Detection
System**

A dissertation submitted in the partial fulfillment of the requirement
for the award of the degree of

BACHELOR OF TECHNOLOGY
IN
INFORMATION TECHNOLOGY

Submitted by

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DECLARATION

We, *Vyom Bhatia, Maitraiye Saxena, Shabad Sawhney, Vivek Kumar* (Reg.No.1081230004, 1081230005, 1081230006, 1081230008) hereby declare that the work which is being presented in the dissertation “*Network Traffic Monitoring with Attack and Intrusion Detection System*” is the record of authentic work carried out by us under the supervision of **Mr. Chiranjit Dutta** in the Department of Information Technology, SRM University, NCR Campus, Modinagar, Ghaziabad (U.P.) and submitted in the partial fulfillment for the award of the degree of **Bachelor of Technology** in Information Technology. This work has not been submitted to any other University or Institute for the award of any Degree/Diploma.

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BONAFIDE CERTIFICATE

Certified that this project work entitled “*Network Traffic Monitoring with Attack and Intrusion Detection System*” is the bonafide work of *Vyom Bhatia, Maitraiye Saxena, Shabad Sawhney, Vivek Kumar* (Reg.No.1081230004, 1081230005, 1081230006, 1081230008) who carried out the research under my supervision. Certified further, that to the best of my knowledge the work reporting here in does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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ABSTRACT

Every organization, irrespective of its size depends on networking technologies. These networks hold the working of entire organization and thus are very important part of the organization. Being the backbone of the business, it is vulnerable to attacks from crackers and rival organizations to gain unauthorized information or to cause harm to the business of the organization. The aim of the project is to protect the network infrastructure of the organization by developing a software to monitor the network and detect malicious activities on it. In order to demonstrate the working of the software, different attacks have been developed to crack into the network infrastructure. An intrusion detection system (IDS) is a device or software application that monitors network or system activities for malicious activities or policy violations and produces reports to the administrator, whereas network traffic monitoring is the process of sniffing, reviewing, analysing and managing network traffic for any abnormality or process that can affect network performance, availability and/ or security.

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LIST OF ABBREVIATIONS

Sr. No.	Abbreviation	Full form
1.	Msg	Message
2.	Admin	Administrator
3.	IP	Internet Protocol
4.	DoS	Denial of Service
5.	IDS	Intrusion Detection System
6.	NIDS	Network Intrusion Detection System
7.	ARP	Address Resolution Protocol
8.	SSH	Secure Shell

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