

Real Time Data Collection Using
Scapy and WireShark

Data Pre- Processing, Cleaning and
Feature Extraction

DOS, DDOS Model

Port Scanning Model

Web Based Model

Access Attack Model

Number of Packets
per Second

Packet Size

Flow Duration

TCP SYN Count

TCP ACK Count

Ratio of Incoming and
Outgoing Packets

Number of Ports
Connected

Number of
Connections for
single IP Address

Connection Attempt
Frequency

Duration of Each
Connection

HTTP Request Based
Features

Header Based
Features

Presence of Script in
the Request

Input Validation
Feature

Number of Failed
Login Attempts

Use of Default
Credentials

Multiple Failed
Authentications

SSH/RDP Login
Attempts

The Features From Real Time Data Divided and Sent to the
Respective Models Parallely.

Parallel Execution

Notifies Whether the Network Traffic has an Anomaly or
Mallicious Request