

how kavach (ai -firewall) works.

step 1

Using scapy python lib :

To generate the dataset similar to real network



Step 2

then we train our ml model on ml algo (randomforest)
by dataset KDDtest .

this model is based on the supervised learning.

Normal packet =0

Malicious packet =1



step 3

now our model is trained to detect anomaly and
intrusion . we apply our model on scapy produce
dataset . by joblib (Python lib.)



step 4

now we display the suspicious ip and how this ip or port is blocked .(we just show this but we are not really blocking the ip because it will required changing of os setting which is not required in initial stage .)

till this point we have made our model_



step 5

now we need eye catching dashboard to display our model result .

where we show regular network and alter when malicious activities takes place . after that show which ip and port in blocked etc .



step 6

now model is ready at backend . so we need api to give responsive to fronted to display on dashboard.

we use flask/fast api for this work.



Step 7

Till time we are ready with our tech work.

Now we need ppt and pitch idea to shortlist at college level.

Most important part of hackathon clear and concise ppt . lots of team eliminated because of less clear ppt.