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An Artificial Intelligent Mechanism for Future Networks using Mininet Wi-Fi

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Abstract: In this paper, Mininet Wi-Fi was used to simulate a Software Defined Network to demonstrate Mininet Wi-Fi's s ability to simulate their post and wireless dimension by assigning site to other site or access points and revoking these wireless associations which can also be integrated into the existing network. Need of networks continuously growing with more clients, more base points, and more network traffic. The security of these networks and network topologies becomes the most crucial part. The discovered mechanism will work in the network for security purposes. Mininetwi-fi will run the topology and parallellyWireshark that start capturing the network packet and protocol-like information. The extracted information will load in the CIC flow meter to make that readable. Further by processing that data using AIML algorithms data will be shuffled to avoid overfitting&underfitting then will be classified and labeled as normal data and attacked data. These results benefit modern and current networkline-up as the live network devices can also interact with the testing space for the data center, cloud, and mobile providers. The proposed framework can correctly enhance the overall performance of the synchrophasor based adaptive dependability/ security bias scheme in the course of DoS assaults and keep away from maloperation of the security devices, which enhances the strength system's balance.

Keywords: Mininet Wi-fi, DDOS, CIC flow meter, Wire shark

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