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(57) Abstract :
ABSTRACT DESIGN AND ANALYSIS OF SELF-PROTECTION FRAMEWORK SYSTEM INTEGRATE WITH FOG COMPUTING AND IOT The present disclosure discloses a fog computing based self-protection system that predict the occurrence of malicious behavior by monitoring the system activities. The fog computing network nodes in the present disclosure act as an intermediate layer between IoT devices and cloud server. The distributed fog nodes comprises of a detection mechanism, prediction mechanism and response mechanism These mechanisms are combined at fog node to intelligently interpret and neutralize the cyber-attacks in IoT environment at a faster rate. The present disclosure uses an online-sequential extreme learning machine (OS-ELM) algorithm at the fog nodes to detect the cyber-attacks for known attack patterns in IoT environment.In the case of an unkown attack pattern the present disclosure uses fuzzy logic to determine the attack. The data's from the fog nodes can be accessed by a system administrator and analyse all the activities held on the fog nodes,if needed can be used for forensic analysis.

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