(12) PATENT APPLICATION PUBLICATION

(21) Application No.202411012347 A

(19) INDIA

(22) Date of filing of Application :21/02/2024

(43) Publication Date : 01/03/2024

(54) Title of the invention : SYSTEM AND METHOD FOR DYNAMIC SIMULATION-BASED ADAPTIVE INCIDENT RESPONSE

(51) International classification	:G06N0020000000, G09B0019000000, G06N0007000000, G06N0003080000, G06N0005020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
   1)**Chitkara University**
      Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ----------- -----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
   1)**RANA, Varun**
Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala ----------- -----------

(57) Abstract :
A system (100) and method (200) for dynamic simulation-based adaptive incident response is provided. The system (100) includes a dynamic simulation engine (116) that combines machine learning models with heuristic algorithms to generate realistic and nuanced threat simulations. The threat simulations enable organizations to assess their preparedness and response capabilities in a controlled environment. The system (100) further includes a continuous learning mechanism that collects feedback from real-world incidents and previously simulated scenarios, enhancing the system's (100) predictive capabilities over time, ensuring the system (100) can adapt and effectively address evolving cyber threats. The system (100) offers advantages such as enhanced threat simulation, improved predictive capabilities, adaptability, collective learning and collaboration, cost-effective testing, and improved incident response planning. The system (100) provides a comprehensive solution for organizations to strengthen their cybersecurity posture, enhance incident response capabilities, and increase resilience against cyber threats.

No. of Pages : 32 No. of Claims : 10