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(54) Title of the invention : MACHINE LEARNING BASED CYBERSECURITY SYSTEM FOR SMART GRIDS

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(57) Abstract :

The present disclosure proposes a machine learning based cybersecurity system for smart power grids that utilizes neural networks to provide quick solution to cyber-attacks on smart power grids and finds solution to unknown cyber-attacks. The cybersecurity system comprises a database 101, a sensor data collection module 102, and a cybersecurity module 103. The proposed system provides quick response to corresponding controlling authorities to control the cyber-attack in smart power grids. The system maintains a database of historical cyber-attack sources to enable the system to identify the source of cyber-attack. The proposed cybersecurity system generates a solution to an unknown attack by splitting it into small problems. The cybersecurity system aids to prevent unknown physical damage to power components of the smart power grid by activating protection circuits using sensor data from individual components of the smart power grid.

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