Smart microgrid system detection

The objective of this paper is to develop an anomaly detection framework for the smart microgrid system at MCAS Miramar to enhance its cyber-resilience. We implement predictive analytics using machine ...

In this paper, a network security risk detection method based on Artificial Immune Algorithm for the smart microgrid monitoring system is proposed, which has the advantages of high ...

The results confirm that lightweight machine-learning-based intrusion-detection methods can provide fast, accurate, and efficient cyberattack detection without relying on complex deep-learning models.

The capabilities of this platform are demonstrated on a detailed microgrid model that is deployed on a real-time co-simulation testbed. A hybrid rule-based and machine learning anomaly detection ...

In this way, machine learning algorithms are deployed to analyze the data collected from a set of installed sensors in the microgrid system in order to detect anomalous events in the system.

A novel multi-layer cybersecurity framework that combines blockchain authentication, AI-driven anomaly detection, and system self-healing for smart microgrids. Real-time threat mitigation ...

Ankitdeshpandey & Karthi, R. Development of intrusion detection system using deep learning for classifying attacks in power systems.

The combination of blockchain and wavelet transform methodologies can provide a robust, multi-layered approach to cyber-security in smart DC microgrids, ensuring both real-time detection ...