Smart Microgrid Detection System

Accordingly, the reliable protection of MGs considering uncertainty in RESs is crucial for planners and operators. This paper uses data analysis to extract knowledge from locally available...

Abstract-- Fault diagnosis is essential to attain the microgrid"s stable, reliable, and economical operation. However, a microgrid"s fault current varies drastically based on the connected ...

In this context, the application of machine learning techniques has shown promise in enhancing the accuracy of fault detection and classification in MGs. A critical component of this ...

Reviews microgrid architecture, key components, and control strategies. Highlights various AI models along with their challenges and advantages. Presents AI applications in sizing, control, ...

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 ...

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 ...

The traditional methods for detection of faults in microgrid have faced significant challenges like inability to handle various fault scenarios. Therefore, this research proposes modified dragonfly ...

We implement predictive analytics using machine learning to deal with cyber-uncertainties and threats within the microgrid environment. An autoencoder neural network is implemented to classify and ...

Web: https://www.jaroslavhoudek.pl