

On the day of Russia's invasion of Ukraine, the cyberattack on ViaSat satellite communications affected space-based assets engaged for command and control of Enercon's wind ...

With this new kind of encryption, full datasets from wind energy generators could be sent to stakeholders while preserving the confidentiality needed for trade secrets. The proposed system ...

In this study, we demonstrate a wind-driven cryptographic triboelectric random number generator (WCT-RNG) by using a W-TENG whose operating condition for wind speed is below 3 m/s ...

This method involves locating and encrypting wind turbine systems independently, followed by overall image encryption, effectively protecting the wind turbine system from information ...

Utilizes the YOLOv5 model to accurately locate and identify wind turbines, and applies a proposed encryption scheme to protect these images locally and globally, enhancing wind turbine ...

In this paper, a new secure communication scheme is proposed in consideration of the security requirements of transmitted images during the detection of wind turbines process. The ...

Imagine a scenario where a hacker gains access to a wind farm's control system, manipulating turbine speeds to cause mechanical failures or even widespread blackouts. The ...

In support of a Department of Energy (DOE) Wind Energy Technologies Office (WETO) project, the team built a high-fidelity implementation of wind turbine generators, site control systems, and ...

Funded by WETO and led by Sandia National Laboratories, the WindWeasel project is developing a host-based intrusion detection system for wind turbine controllers.

Web: <https://rrrprojects.co.za>