## AI IN WIND TURBINE ABSTRACT

This is a hybrid regulator to improve a grid-connected hybrid power system's low-voltage ride-through capabilities. The suggested control system ensured the hybrid renewable energy system's low-voltage ride-through effectiveness under power fall and failure scenarios. The intelligent technique takes voltage, current, and RPM into account when determining low-voltage ride-through capacity. These variables are used to present and demonstrate the machine learning algorithm (ANN) approach's goal function. Based on the generated dataset, the ANN determines the optimum viable control signals for transmission line and turbine converters. When there is a fault, the proposed method is employed for system regulation and voltage instability. This project is implemented in the Arduino IDE terminal.

