Hybrid Energy Production System with PV Array and Wind Turbine and Pitch Angle Optimal Control by Genetic Algorithm (GA)
Original Research, A1

Hosseini H., Farsadi M., Khalilpour M., Razmjooy N.


ABSTRACT: In the 21st century because of expensive fossil fuels, usage of clean energy such as solar energy, wind energy, etc. will be increased. In order to optimal control of pitch angle at high speed of wind, genetic algorithm has been used.

Keywords: Wind Turbine, Photo Voltaic (PV), Genetic Algorithm

PII: S232251141200002-1

Optimum Design of PSS and SVC Controller for Damping Low Frequency Oscillation (LFO)
Original Research, A2

Hosseini H., Tusi B., Razmjooy N., Khalilpour M.


ABSTRACT: The development of the demand for electrical energy leads to loading the transmission system close to their limits that ... simulation show that the SVC with PID controllers is more effective in damping LFO compared to PSS with PID controllers.

Keywords: 3 to 5 keyword or phrases.

Hot paper

PII: S232251141200003-1

An Efficient Algorithm for Lip Segmentation in Color Face Images Based on Local Information
ABSTRACT

Lip detection is used in many applications such as face detection and lips reading. In previous works, researchers have ... on CVL face database. Our experiments show that new algorithm gives better results than previous works on this database.

Keywords: lip detection, skin, saturation, standard deviation.
ABSTRACT: This paper propose the use threshold technical and artificial neural network (ANN) for clean and enhancement scanned image. Process of cleaning image is the preprocessing for system handwritten recognition that we do this work in this paper.

Keywords: threshold technical, artificial neural network, handwritten recognition, clean image, multilayer perceptron
Wireless mesh networks (WMNs) have emerged as a key technology for next-generation wireless networking. They are widely used in various applications, including video coding and wireless channel specifications, with focuses on video surveillance systems.

Keywords: Wireless mesh network; Client; Router; Video
A Lak, Nazarpour D, Ghahramani H.


ABSTRACT: A long transmission line needs controllable series as well as shunt compensation for power flow control and voltage stability. The sub-synchronous resonance (SSR) is one of the phenomena that occurs in long transmission lines. The static VAR compensator (SVC) is the most common type of controller used to mitigate SSR. The purpose of this research is to compare the performance of different control methods of the SVC. The MATLAB/Simulink software program was used to verify the effectiveness of each control method.

Keywords: Sub-Synchronous Resonance (SSR), Static VAR Compensator (SVC), Fuzzy Logic Controller (FLC), Adaptive Neuro-Fuzzy Inference System (ANFIS), Fast Fourier Transform (FFT).

PII: S232251141200007-1

Mitigating SSR in Hybrid Wind-Steam Turbine with TCSC Based Fuzzy Logic Controller and Adaptive Neuro Fuzzy Inference System Controller

Original Research, A7

Hosseini H. and Tousi B.
The increasing requirement to the clean and renewable energy has led to the rapid development of wind power systems all over the world. This paper presents a new control strategy for a synchronous generator-based wind turbine system. The proposed method is based on the combination of a synchronous wind generator and an inverter-driven permanent magnet synchronous motor. The controllers are designed using the Imperialist Competitive Algorithm (ICA) to optimize the parameters of the controllers. Finally, the performance of the two controllers is compared.
| **ABSTRACT:** | Abstract – Automatic Generation Control (AGC) for power system operation. | **Keywords:** | Automatic Generation Control (AGC), proportional integral derivative (PID), Automatic Voltage Regulator (AVR), imperialist competitive algorithm (ICA) |