Research Title

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Abstract

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PII: S232251141200001-1

Hybrid Energy Production System with PV Array and Wind Turbine and Pitch Angle Optimal Control
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

Optimum Design of PSS and SVC Controller for Damping Low Frequency Oscillation (LFO)
ABSTRACT: The development of the demand for electrical energy leads to loading the transmission system close to their limits that causes the generation system to be unable to satisfy the load demand. The combination of load frequency oscillation (LFO) and low-frequency oscillation are two challenges that need to be addressed in power systems. In this paper, the authors present a simulation framework to study the effects of the SVC with PID controllers. The simulation results 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.

PII: S232251141200004-1
Zali Varghahan B and Chehel Amirani M.


ABSTRACT: This paper propose the use threshold technical and artificial neural network (ANN) for clean and enhancement scanned images. 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

PII: S232251141200005-1

Video Streaming over Wireless Mesh Networks
Kalbkhani H and Zali. B.


ABSTRACT: Wireless mesh networks (WMNs) have emerged as a key technology for next-generation wireless networking. Wireless mesh networks require strict QoS requirements, such as video coding and wireless channel specifications, with focuses on video surveillance systems.

Keywords: Wireless mesh network; Client; Router; Video.

PII: S232251141200006-1

Novel Methods with Fuzzy Logic and ANFIS Controller Based SVC for Damping Sub-Synchronous Resonance and Low-Frequency Power Oscillation

Original Research, A6
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 effectiveness of the control system can be enhanced by installing 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

Hosseini H. and Tousi B.
ABSTRACT: The increasing requirement to the clean and renewable energy has led to the rapid development of wind power systems all over the world. In this paper an automatic generation control (AGC) system is designed. This AGC system consists of two controllers: Proportional-Integral-Derivative (PID) controller and Imperialist Competitive Algorithm (ICA) controller. In this research the application of stochastic algorithms is used for the first time in the AGC system. The controllers are designed for three-area systems. The results show the effectiveness of the proposed controllers. The combination of synchronous wind generator based wind turbine. Finally the operation of two controllers have been compared.

Keywords: 3 to 5 keyword or phrases.

PII: S232251141200008-1
ABSTRACT:
Abstract – Automatic Generation Control (AGC) is a very imperative issue in power system operation for providing electric energy. In this context, an effective AGC is needed to maintain the system in a balanced state. The AGC improves the efficiency of power systems by regulating the power generation and load. The automatic voltage regulator (AVR) is a key component in the AGC system. A novel approach for tuning the AVR parameters by using imperialist competitive algorithm (ICA) has been proposed. Finally the results have been compared.

Keywords:
Automatic Generation Control (AGC), proportional integral derivative (PID), automatic voltage regulator (AVR), imperialist competitive algorithm (ICA)