Hybrid Energy Production System with PV Array and Wind Turbine and Pitch Angle Optimal Control by Genetic Algorithm (GA)
ABSTRACT: In the 21st century because of expensive fossil fuels, usage of clean energy such as solar energy, wind energy, etc. will be increased. For efficient usage of renewable energy, control systems are needed. 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 (GA)

PII: S232251141200002-1

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 ... 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: S23251141200003-1

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.
This paper proposes the use of threshold techniques and artificial neural networks (ANN) for cleaning and enhancing scanned images. The process of cleaning images is a preprocessing step for handwritten recognition, which is the focus of this paper.

**Keywords:** threshold techniques, artificial neural network, clean image, multilayer perceptron

**PII:** S232251141200005-1

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**Video Streaming over Wireless Mesh Networks**

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**Original Research, A5**
Wireless mesh networks (WMNs) have emerged as a key technology for next-generation wireless networking. Wireless mesh networks are deployed on a large scale for several applications and 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 and shunt compensation for power flow control and voltage stability. Static VAR Compensator (SVC) is a frequently used controllable compensation device. Sub-Synchronous Resonance (SSR) is a concern, and SVC is a common solution for mitigation. In this paper, the effectiveness of adaptive neuro-fuzzy logic controller (ANFIS) and fuzzy logic controller (FLC) for mitigating SSR is investigated. 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 C Based Fuzzy Logic Controller and Adaptive Neuro-Fuzzy Inference System Controller

Original Research, A7

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. The large-scale utilization of wind power systems may result in the overstep of stability limits of the power systems. Therefore it is necessary to enhance the stability of the power system. This paper presents a novel 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

A Novel Method for Designing PSS-AVR by Imperialist Competitive Algorithm (ICA) for three-area AGC System

Original Research, A8

Hosseini H. and Tousi B.
| ABSTRACT: | Abstract – Automatic Generation Control (AGC) and automatic voltage regulator (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) |