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 increase. The amount of energy produced by Wind Turbine (WT) can change based on the wind speed. In order to improve the energy production, the optimal control of pitch angle at high speed of wind is needed.

Keywords: Wind Turbine, Photo Voltaic (PV), Genetic Algorithm (GA), Maximum Power Point Tracking (MPPT), 12-Pulse Inverter.
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

Kalbkhani H, Chehel Amirani. M.


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

Enhancement and Cleaning of Handwritten Data by using Neural Networks and Threshold Techniques.
ABSTRACT: This paper proposes the use of threshold techniques and artificial neural networks for image enhancement and recognition. The process of cleaning images is a preprocessing step for system handwriting recognition, which is the work done in this paper.

Keywords: threshold technique, artificial neural network, handwriting recognition, clean image, multilayer perceptron

PII: S232251141200005-1

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


ABSTRACT: Wireless mesh networks (WMNs) have emerged as a key technology for next-generation wireless networking. Wireless mesh networks provide various services, 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 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. These requirements are met 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 C Based Fuzzy Logic Controller and Adaptive

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. In this paper, a novel method for designing PSS-AVR based on the Imperialist Competitive Algorithm (ICA) is proposed. The effectiveness of the proposed method is demonstrated through simulation studies on a three-area AGC system. Finally, the operation of two controllers has been compared.

Keywords: 3 to 5 keyword or phrases.
**ABSTRACT:**

Abstract – Automatic Generation Control (AGC) is a very imperative issue in power system operation for providing electric power. In this paper, a new method for tuning AGC 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)