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. 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), 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
Original Research, A3

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.
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 a system of handwritten recognition. In this paper, we focus on this work.

**Keywords:** threshold technique, artificial neural network, handwritten recognition, clean image, multilayer perceptron
Kalbkhani H and Zali. B.


**ABSTRACT:** Wireless mesh networks (WMNs) have emerged as a key technology for next-generation wireless networking. Wireless mesh networks provide a flexible and cost-effective solution for various applications, including video surveillance systems. This paper focuses on the requirements, such as video coding and wireless channel specifications, with a particular emphasis 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
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. In this paper a new design method for the Actively Damping Power System Stabilizer (PSS) and Automatic Voltage Regulator (AVR) is presented. The classical PSS is used in combination with AVR, which is based on the extended stable area of a three-area power system. A combination of synchronous wind generator based wind turbine is used as a basic wind power system. A combination of the two controllers is used to the design of a new method for the PSS-AVR that is based on Imperialist Competitive Algorithm (ICA). The performance of the combined controllers is compared using the simulation results and it is shown that the proposed method is capable of improving the stability of the system.

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) is a very imperative issue in power system operation for providing electric energy to meet the load demand. In this study, an automatic voltage regulator (AVR) and a stabilizer to control the frequency and voltage 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), imperialist competitive algorithm (ICA)