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. For the maximum utilization of wind energy, use of suitable frequency converter is important. 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 Technique.
ABSTRACT: This paper propose the use threshold technical and artificial neural network (ANN) for clean and enhancement scanned documents. The 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

Video Streaming over Wireless Mesh Networks

Original Research, A5
Wireless mesh networks (WMNs) have emerged as a key technology for next-generation wireless networking. They are particularly suitable for applications requiring high data rates, low latency, and high reliability. This paper focuses on the design and implementation of a novel video surveillance system based on WMNs. The system utilizes a combination of advanced video compression techniques and efficient routing algorithms to ensure reliable and high-quality video transmission. The proposed system is designed to meet the stringent requirements of video surveillance systems, such as real-time processing, low latency, and high data throughput.
A Lak, Nazarpour D, Ghahramani H.


ABSTRACT: A long transmission line needs controllable series and shunt compensation for power flow control and voltage stability. The Static VAR Compensator (SVC) is used for this purpose. The SVC can be controlled 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

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. This paper presents a novel method for designing a Power System Stabilizer (PSS) and Automatic Voltage Regulator (AVR) by Imperialist Competitive Algorithm (ICA) for three area AGC System. Two controllers, a PSS and an AVR, are designed separately and then in combination of synchronous wind generator based wind turbine. Finally the operation of two controllers have 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 energy. This paper presents a novel method for optimizing AGC controller 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)