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. These energy sources need advanced control systems, in which genetic algorithm (GA) is used to optimize their performance. Optimization of pitch angle for a wind turbine at high speed of wind, using GA, leads to increasing the power generated by the wind turbine. The optimal control of wind turbines is very important for the power distribution system. 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 Pulses Inverter, Optimal Control

Optimum Design of PSS and SVC Controller for Damping Low Frequency Oscillation (LFO)
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.

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**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 image. 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

**Pll:** S232251141200005-1

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**Video Streaming over Wireless Mesh Networks**

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Original Research, A5
ABSTRACT: Wireless mesh networks (WMNs) have emerged as a key technology for next-generation wireless networking. Wireless mesh networks (WMNs) have emerged as a key technology for next-generation wireless networking. This paper presents a novel approach for video compression and wireless channel specifications, with focuses on video surveillance systems.

Keywords: Wireless mesh network; Client; Router; Video compression.
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. Sub-Synchronous Resonance (SSR) occurs when the frequency of an instability is close to the frequency of the power system. The SVC is used to mitigate this phenomenon. 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. The cost and effectiveness of these systems are determined by the use of wind turbines, which are controlled by the Active and Reactive Power Control System (APCC). In this research, a new method for designing the APCC of the wind turbine is proposed. This method is based on the Imperialist Competitive Algorithm (ICA). The effectiveness of this method is tested by comparing it with the existing methods in a three-area Automatic Generation Control (AGC) system. The results show that the proposed method is more effective and efficient than the existing methods.

Keywords: 3 to 5 keyword or phrases.
Abstract – Automatic Generation Control (AGC) is a very imperative issue in power system operation for providing electric frequency stability. In this paper, a new controller has been presented for AGC. This controller is designed by using proportional Integral Derivative (PID) control and Automatic Voltage Regulator (AVR). The designed controller parameters by using imperialist competitive algorithm (ICA) has been proposed. Finally the results have been compared.