Hybrid Energy Production System with PV Array and Wind Turbine and Pitch Angle Optimal Control by Genetic Algorithm (GA)
Hosseini H., Farsadi M., Khalilpour M., Razmjooy N.


**ABSTRACT:** In the 21st century because of expensive fossil fuels, usage of clean energy such as solar energy, wind energy, etc. will be increased. The purpose of this paper is to study the effect of adding Photo Voltaic (PV) and Wind Turbine (WT) to the 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), MPPT, 12-Pulse Inverter, Optimal Control

**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.
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.
ABSTRACT: This paper propose the use threshold technical and artificial neural network (ANN) for clean and enhancement scanned images. 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

PII: S232251141200005-1

Video Streaming over Wireless Mesh Networks
ABSTRACT:
Wireless mesh networks (WMNs) have emerged as a key technology for next-generation wireless networking. Wireless mesh networks are wireless ad hoc networks in which multiple wireless routers establish a mesh topology, thus creating a self-configuring, self-healing, and self-organizing network. Each router has a client device, and multiple links are established between the clients and the routers. The WMN is employed in a variety of applications, such as video coding and wireless channel specifications, with focuses on video surveillance systems.

Keywords: Wireless mesh network; Client; Router; Video surveillance

PII: S232251141200006-1
ABSTRACT:

A long transmission line needs controllable series as well as shunt compensation for power flow control and voltage stability. Conventional device such as Static Var Compensator (SVC) cannot control the oscillation caused by the long transmission line. This paper proposes a new control strategy for the SVC 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. Wind power systems are highly dynamic due to the uncertainty of wind speed. A novel method for designing the power system stabilizer (PSS) and automatic voltage regulator (AVR) based on the Imperialist Competitive Algorithm (ICA) is proposed. This controller is used to stabilize the power system and provide fast dynamic response. A combination of synchronous wind generator based wind turbine. Finally the operation of two controllers have been compared.

Keywords: 3 to 5 keyword or phrases.

Pll: 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 for consumers. The main aim of AGC is to regulate power generation to meet the load demand. The automatic voltage regulator, proportional integral derivative (PID), is the most popular technique used for AGC. In this paper, the automatic generation control 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)