Path-Finding in Multi-Agent, Unexplored and Dynamic Military Environment Using Genetic Algorithm

Saeedvand S, Naser Razavi S and Ansaroudi F.
ABSTRACT:
Path-finding in multi-agent, unexplored and dynamic military environment is one of the most important issues for solving small-scale tactical mission assignments. The necessary constraints to find path in a dynamic and unexplored environment are considered and Genetic algorithm is used.

Keywords: Multi-Agent System, Path-finding, Chromosome

PII: S232251141500002-4

Optimal Design of Bearingless Permanent Magnet-Type Synchronous Motors for Generating Maximum Levitation Force
Original Research, D2
Honarjou M., Faraji H. and Shirzadi A.

ABSTRACT: One maintenance task that still exist with conventional motors, are bearing lubrication and renewal. Bearingless motors are motors that work without bearings, the most important feature is their ability to work with high efficiency and their high durability. In this paper, the maximum levitation force involved with rotor thickness of the Permanent Magnetic Synchronous Motor (PM SM) is investigated. The simulation is done in Maxwell software.

Keywords: Bearingless Permanent Magnet Synchronous Motor, Maximum Levitation Force, Optimization, Thickness of PM.

PII: S232251141500003-4

Original Research, D3
Daryasafar N and Dehghani H.

ABSTRACT: Studying an Improved Interval-Only Algorithm for the De-Interleaving of Radar Pulses

In the electronic intelligence system (ELINT) in the process of identification radar signals are used both technical and electronic methods. In this paper, the interval-only algorithm is improved, and the block diagrams and implementations steps as well as their ability in Deinterleaving of radar pulses are analyzed.

Studying an Improved Interval-Only Algorithm for the De-Interleaving of Radar Pulses

Original Research, D3
Daryasafar N and Dehghani H.

ABSTRACT: In the electronic intelligence system (ELINT)
**Direct Kinematics solution of 2-(6UPS) Hybrid Manipulator based on Neural Network**

Original Research, D4

Rahmani A, Ghanbari A, Mahboubkhah M.


**ABSTRACT:** This contribution addresses forward kinematics of 2-(6UPS) Manipulators, Stewart Mechanism,
Current Measurement with Optical Current Transformer

Applying an optical current transformer (optical CT) to substations has several advantages, e.g. high accuracy and high isolation. The optical CT utilizes the light intensity which is modulated by a conductor carrying current. The current to be measured is carried by a sensing fiber, which is contained in an insulator. As an application of the optical CT, a new fault location system has been developed.

Keywords: OCT, Fiber Optic, Current Sensor, Protection

Reliability Constrained Energy and Reserve Scheduling of Microgrids Including High Penetration of Renewable Resources
ABSTRACT:
Due to environmentally and economically advantages, high deployment of renewable energy sources (RES) such as wind or solar is anticipated in the future power systems. However, RES penetration in the power system decreases the conventional reserve requirement due to non-synchronization and power generation variability. To maintain power quality and system reliability, a reliable reserve requirement is necessary. This paper introduces a model for energy and reserve scheduling of a multi-reservoir system with intentional control. Through simulation results, the presented model is shown to be more economical and reliable than the conventional method (fully reserved). The optimal requirement reserve is determined by a tradeoff between reliability and economics.

Keywords:
Microgrids, renewable energy sources (RES), energy and reserve scheduling, expected energy not supplied (EENS).

PII:
S232251141500007-4

Optimal Charge-Discharge Scheduling of Electric Vehicles Considering Their Battery Lifetime

ABSTRACT:
Due to environmentally and economically advantages, high deployment of renewable energy sources (RES) such as wind or solar is anticipated in the future power systems. However, RES penetration in the power system decreases the conventional reserve requirement due to non-synchronization and power generation variability. To maintain power quality and system reliability, a reliable reserve requirement is necessary. This paper introduces a model for energy and reserve scheduling of a multi-reservoir system with intentional control. Through simulation results, the presented model is shown to be more economical and reliable than the conventional method (fully reserved). The optimal requirement reserve is determined by a tradeoff between reliability and economics.

Keywords:
Microgrids, renewable energy sources (RES), energy and reserve scheduling, expected energy not supplied (EENS).

PII:
S232251141500008-4

Introducing a New High-Order Chaotic System with an Equilibrium Point and Stabilizing It Using LQR Controller

ABSTRACT:
In this paper, a new high-order chaotic system is proposed. This system has an equilibrium point on center and its stability around the equilibrium point is guaranteed using a Linear Quadratic Regulator (LQR) controller.

Keywords: Chaotic System, High-Order Chaos, Lyapunov Exponent, Equilibrium Point, LQR Controller