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

Original Research, D1
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 ... 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
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 provide desirable solutions for many applications. This paper presents an innovative solution to design a special bearingless Permanent Magnet Synchronous Motor (PMSM) configuration that would provide the optimum levitation force. The effect of the thickness of PM on the maximum levitation force is also investigated. The simulation is done in Maxwell software.

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

PII: S232251141500003-4

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) process, the identification of radar signals is performed using both technical and physical methods. In the present research, the efficiency of the designed algorithms in this field is studied, their block diagrams and implementations steps as well as their ability in Deinterleaving of radar pulses are analyzed.
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 kinematic
Keywords: 2-(6UPS) Manipulators, Stewart Mechanism,
**Current Measurement with Optical Current Transformer**

![Diagram of Optical Current Transformer](image)

**Original Research, D5**

Alavi O.


**ABSTRACT:** Applying an optical current transformer (optical CT) to substations has several advantages, e.g. high accuracy and reliability. OCT utilizes the light from the chip to generate an electrical signal. The sensor head consists of a fiber optic system, which is separated from the core and has a high sensitivity to the electromagnetic field. OCT relies on a pair of optical fibers that are 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**
ABSTRACT:
Due to environmentally and economically advantages, high deployment of renewable energy sources (RES) such as wind or solar energy is considered as a promising method. In this paper, the economic and reliability issues of RES are discussed. The main objective is to provide sufficient backup energy to meet the load demand. In order to achieve this, a high-utility reserve is required. However, the required reserve should be as low as possible, since high reserves cause increased costs and decreased reliability. Therefore, 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