Medical Image Enhancement by Image Fusion in Wavelet Domain

Original Research, C14

Hojjati S. H., Hosseinzadeh M., Reihanian A.

ABSTRACT: Owing to advances in medicine, with the increase in medical image applications, high quality images are required. In this paper, we propose an image fusion technique that fuses two images while improving their resolution and quality. The algorithm uses wavelet transform for denoising and contrast limited adaptive histogram equalization for contrast enhancement. The results indicate that the proposed algorithm significantly improves the quality of an image while removing its noise.

Key words: Wavelet transform, Medical image, Image fusion
Modeling and Design of Controllers for Switched Reluctance Motor Based on Asymmetrical Γ-Source Inverters

Original Research, C15
Mehdizadehmoghadam SM and Hajizadeh M.

ABSTRACT: In this paper a power electronic converter on the basis of asymmetrical Γ-source inverter has been identified to control the Switched Reluctance Motor. The advantages of proposed control system has been tested in MATLAB/simulink to prove the performance of the designed control system.

Keywords:
Power Electronic Converter, Asymmetrical Γ-Source Inverter.
Path-finding in Multi-Agent, unexplored And Dynamic Military Environment Using Genetic Algorithm

Original Research, C16
Saeedvand S, Razavi SN, Ansaroudi F.

ABSTRACT :

Keywords :

Path-finding in Multi-Agent, unexplored And Dynamic Military Environment Using Genetic Algorithm

Original Research, C16
Saeedvand S, Razavi SN, Ansaroudi F.

ABSTRACT :

Keywords :
Placement of Dispersed Generation with the Purpose of Losses Reduction and Voltage Profile Improvement in Distribution Networks Using Particle Swarm Optimization Algorithm

Original Research, C17
Yousefpour K.

ABSTRACT: Optimal placement of dispersed generation in electrical distribution systems was carried out considering the voltage profile, target losses, and the initial number of dispersed generation positions and a position with no dispersed generation. The results indicated the competency of the proposed algorithm.

Keywords: Optimal Placement, Dispersed Generation, PSO Algorithm, Voltage Profile, Losses

A Compact Monopole Antenna for Wireless Applications

Original Research, C18
Jamalpoor R.

ABSTRACT: A tiny wideband microstrip-fed monopole antenna which includes of a radiating patch with two L-shaped notches and stubs is presented. The antenna is designed and simulated using Ansoft HFSS and details of the proposed antenna design approach and measured results are also presented and discussed.

Keywords: Microstrip Antenna, Monopole, Wireless.
ABSTRACT: Welding, as one of the most useful method for permanent joint of components, is of great importance in industry. Among the different parameters affecting the quality of weld, the hardness of melted zone is one of the most important parameters. In this research, the response surface methodology of the Taguchi method is employed to predict the hardness of the melt zone. The results show that welding speed, the length of spot, and the thickness of magnesium oxide nanoparticles had respectively the highest impact on the hardness of melted zone.

Keywords: Submerged Arc Welding, Hardness of Melted Zone, Taguchi Method, Analysis of Variance, Optimization
Discretization of Cuckoo Optimization Algorithm for Solving Quadratic Assignment Problems

Original Research, C20
Kazemi E and Dejam S.

ABSTRACT: Quadratic Assignment Problem (QAP) is one of the most difficult combinatorial optimization problems. This paper represents the way of discretizing the Cuckoo optimization algorithm for solving the quadratic assignment problem.

Keywords: Quadratic Assignment Problem (QAP), Meta-Heuristic Algorithms, Discrete Cuckoo Optimization Algorithm (DCOA).