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Nota di contenuto	Preface; Organization; Contents; Part I Intelligent Techniques and Applications; Butterfly Mating Optimization; 1 Introduction; 2 Literature Survey; 3 Patrolling Mating Mechanism; 4 Butterfly Mating Optimization; 4.1 Description of BMO Algorithm; 4.2 Behavior of l-mate Selection Phase; 4.3 GSO Algorithm vs BMO Metaphor; 5 Simulations and Results; 5.1 BMO vs GSO; 5.2 BMO for Other Standard Test Functions; 6 Application of BMO to Higher Dimensional Functions; 7 Conclusions and Future Works; References; A Hybrid Firefly Algorithm and Social Spider Algorithm for Multimodal Function 1 Introduction 2 Related Work; 3 Firefly Algorithm and Social Spider Algorithm; 3.1 Firefly Algorithm; 3.2 Social Spider Algorithm; 4 The Proposed Algorithm; 5 Benchmark Functions and Experimental Setting; 6 Simulation Results; 7 Conclusion; References; Visualization - A Potential Alternative for Analyzing Differential Evolution Search; 1 Introduction; 2 Differential Evolution; 3 Related Works; 4 Visualizing Differential Evolution; 4.1 DE Visualization Using Scatter Plots; 4.2 Visualizing Difference Vector Evolution; 5 Conclusion; References Implementation of Mixed Signal Architecture for Compressed Sensing on ECG Signal1 Introduction; 2 Compressed Sensing; 2.1 Formal

Definition of CS; 2.2 ECG Signal CS in Time Domain; 2.3 ECG CS in Wavelet Domain; 2.4 Types of Existing CS Hardware for Bio-Signals; 3 Improvised CS Encoder Hardware Design; 3.1 Working Princiiple; 3.2 Proposed Hardware; 4 Results and Analysis; 5 Conclusion; References; The Medical Virtual Patient Simulator (MedVPS) Platform; 1 Introduction; 2 The MedVPS Platform; 3 Virtual Patient M Modules; 3.1 History g Taking; 3.2 Physical Examination
3.3 Systemic Exam mination3.4 Investigation; 3.5 Differential Diagnosis; 3.6 Treatment Module; 4 Pilot Study and Findings; 5 Conclusions; References; Intelligent System Based on Impedance Cardiography for Non-invasive Measurement and Diagnosis; 1 Introduction ; 2 Acquisition System; 3 Calculation of Haemodynamic Parameters; 3.1 Denoising; 3.2 Time and Frequency Domain Analysis; 3.3 ANOVA and Multivariate Regression; 4 Conclusion; References; Detection of Parkinson's Disease Using Fuzzy Inference System; 1 Introduction; 2 Preliminaries; 3 Proposed Method; 3.1 Clusterification
3.2 Generation of Fuzzy Inference Structure (FIS)3.3 Decision Making; 3.4 Proposed Algorithm; 4 Experimental Results; 5 Conclusion; References; Feature Selection for Heart Rate Variability Based Biometric Recognition Using Genetic Algorithm; 1 Introduction; 2 Methodology; 2.1 Data Collection; 2.2 Preprocessing; 2.3 Database Specification; 2.4 Feature Set Generation; 2.5 Feature Selection; 3 Genetic Algorithm (GA); 4 Results and Discussions; 5 Conclusion; References; Appendix-I; Driver Eye State Detection Based on Minimum Intensity Projection Using Tree Based Classifiers; 1 Introduction
2 Related Work

Sommario/riassunto

This book contains a selection of refereed and revised papers of Intelligent Techniques and Applications track, and the Special Track on Intelligent Image Processing and Artificial Vision track originally presented at the International Symposium on Intelligent Systems Technologies and Applications (ISTA), August 10-13, 2015, Kochi, India. .