



IEEE Latin America Transactions

JANUARY 2021, Volume 19 Issue 1

IEEEXplore, DOI, ISI, ISSN 1548-0992

REGULAR ISSUE: Electronics, Energy and Computing

Table of Contents	1
Editorial 2021.....	3
Integer Linear Programming Formulations for the RCPSPP with Practical Constraints F. A. C. Duim, P. A. A. L. V. Melo and T. A. Queiroz.....	5
Tabu Search for Service Function Chain Composition in NFV J. Gil-Herrera, and J. F. Botero.....	17
Rating Prediction of Google Play Store Apps with Application of Data Mining Techniques R. G. da Silva, J. de O. L. Magalhães, I. R. R. Silva, R. A. de A. Fagundes, E. A. de O. Lima and M. A. Maciel.....	26
A Multi-Bandgap Periodic Structure Device Acting as Multiplexer or Demultiplexer of Electromagnetic Signals Rodrigo R. Paiva and Rodrigo M. S. de Oliveira.....	33
Dynamic Time Warping in Iris Biometric Recognition Process P. R. da Silva and C. R. Bernadelli.....	42
A Numerical Technique for Breast Medical Research Based on the FSS Transform F. A. Uribe, E. Lozada, J. R. Morales, A. Alanís and N. G. Arana.....	50
A Branch-and-cut Algorithm for the Multi-depot Inventory-routing Problem with Split Deliveries C. M. Schenekemberg, C. T. Scarpin, J. E. Pécora and T. A. Guimarães.....	59
Simulation and Analysis of Complex Behaviors in a DC-DC Buck Converter J. D. Morcillo, J. G. Muñoz and G. Olivar.....	68
Neuro-Fuzzy Control Applied on a 2DOF Structure Using Electromagnetic Actuators J. P. Repinaldo, E. H. Koroishi, and F. A. Lara-Molina.....	75
Self Calibrated Readout Frontend for Capacitive Biosensors A. Culebro, G. Espinosa and C. Reyes.....	83
A New Method of Selecting Safe Neighbors for the Riemannian Manifold Learning Algorithm L. P. Carlini, G. F. Miranda-Junior, G. A. Giraldo and C. E. Thomaz.....	89
Multi-layer Adaptive Fuzzy Inference System for Predicting Student Performance in Online Higher Education R. L. Ulloa-Cazarez, N. García-Díaz and L. Soriano-Equigua.....	98
Embedded Diagnostics of Conveyor Belts Actuated by Induction Motors F. J. Arriaga-Méndez, O. F. Mendiola-Meza, E. Vargas-Mascorro, and L. E. González-Jiménez.....	107

Wearable Full-Body Inertial Measurement with Task Classification Using Deep Learning J. Gaia, E. Orosco and C. Soria.....	115
Output-only Based Identification of Modal Parameters of Linear and Nonlinear Structures by Wavelet Transform D. D. Tannus, D. D. G. B. Cruz and O. A. Z. Sotomayor.....	124
Comparison Between Linear and Tensor Models of EEG Signals Representation R. G. de Magalhães Júnior, F. T. Rocha and C. E. Thomaz.....	132
State Feedback Temperature Control Based on a Smith Predictor in a Precalciner of a Cement Kiln J. Salcedo, V. Feliu and R. Rivas.....	138
Impact of TCSC on Directionality of Traveling Waves to Locate Faults in Transmission Lines E. Reyes-Archundia, J. A. Gutiérrez-Gnecchi, N. F. Guerrero-Rodríguez, A. C. Téllez, A. Méndez-Patiño and J. A. Salazar.....	147
Modelling, Simulation and Code Generation for Electronic Railway Interlocking Systems R. Ghignone, C. Falco, F. Larosa, H. Mendes, L. Chang, M. Menéndez and A. Lutenberg.....	155
Design and Implementation of a Thermoelectric Energy Harvester with MPPT Algorithms and Supercapacitor J. Vega and J. Lezama.....	163