

Contents

Security and Privacy

Design of a Certificateless Designated Server Based Searchable Public Key Encryption Scheme	3
<i>SK Hafizul Islam, Mohammad S. Obaidat, Varun Rajeev, and Ruhul Amin</i>	
On the Security of a Searchable Anonymous Attribute Based Encryption	16
<i>Payal Chaudhari and Manik Lal Das</i>	
Security on “Secure Remote Login Scheme with Password and Smart Card Update Facilities”.	26
<i>Marimuthu Karuppiah, Akshat Pradhan, Saru Kumari, Ruhul Amin, S. Rajkumar, and Rahul Kumar</i>	
Design of Secure and Efficient Electronic Payment System for Mobile Users.	34
<i>Prerna Mohit, Ruhul Amin, and G.P. Biswas</i>	
A Deep Learning Based Artificial Neural Network Approach for Intrusion Detection.	44
<i>Sanjiban Sekhar Roy, Abhinav Mallik, Rishab Gulati, Mohammad S. Obaidat, and P.V. Krishna</i>	

Computing

A Note on the Optimal Immunity of Boolean Functions Against Fast Algebraic Attacks	57
<i>Jing Shen and Yusong Du</i>	
Study of Five-Neighborhood Linear Hybrid Cellular Automata and Their Synthesis.	68
<i>Swapan Maiti and Dipanwita Roy Chowdhury</i>	
Cache Optimized Solution for Sparse Linear System over Large Order Finite Field	84
<i>A.K. Bhateja and Vaishnavi Kannan</i>	
Connected Fair Domination in Graphs	96
<i>Angsuman Das and Wyatt J. Desormeaux</i>	

Coordinating Particle Swarm Optimization, Ant Colony Optimization and K-Opt Algorithm for Traveling Salesman Problem	103
<i>Indadul Khan, Manas Kumar Maiti, and Manoranjan Maiti</i>	
FASER128: Cryptanalysis and Its Countermeasure	120
<i>M.K. Dubey, Navneet Gaba, and S.S. Bedi</i>	
Modelling of Aircraft's Dynamics Using Least Square Support Vector Machine Regression	132
<i>Hari Om Verma and Naba Kumar Peyada</i>	
Accommodative FAS-FMG Multilevel Based Meshfree Augmented RBF-FD Method for Navier-Stokes Equations in Spherical Geometry	141
<i>Nikunja Bihari Barik and T.V.S. Sekhar</i>	
Applied Mathematics	
Bessel Sequences and Frames in Semi-inner Product Spaces.	155
<i>N.K. Sahu, C. Nahak, and Ram N. Mohapatra</i>	
Finiteness of Criss-Cross Method in Complementarity Problem.	170
<i>A.K. Das, R. Jana, and Deepmala</i>	
Imprecise Constrained Covering Solid Travelling Salesman Problem with Credibility.	181
<i>Anupam Mukherjee, Samir Maity, Goutam Panigrahi, and Manoranjan Maiti</i>	
Newton Like Line Search Method Using q -Calculus	196
<i>Suvra Kanti Chakraborty and Geetanjali Panda</i>	
Existence Results of a Generalized Mixed Exponential Type Vector Variational-Like Inequalities	209
<i>N.K. Mahato and R.N. Mohapatra</i>	
On Approximate Solutions to One Class of Nonlinear Differential Equations	221
<i>Inessa Matveeva</i>	
A Davidon-Fletcher-Powell Type Quasi-Newton Method to Solve Fuzzy Optimization Problems.	232
<i>Debdas Ghosh</i>	
Bifurcation Analysis of a Delayed Modified Holling-Tanner Predator-Prey Model with Refuge	246
<i>Charu Arora and Vivek Kumar</i>	

A Higher Order Implicit Method for Numerical Solution of Singular Initial Value Problems	255
<i>M. Kamrul Hasan, M. Suzan Ahamed, B.M. Ikramul Haque, M.S. Alam, and M. Bellal Hossain</i>	
Constrained Data Visualization Using Rational Bi-cubic Fractal Functions . . .	265
<i>S.K. Katiyar, K.M. Reddy, and A.K.B. Chand</i>	
Electrokinetic Flow in a Surface Corrugated Microchannel	278
<i>Subrata Bera and S. Bhattacharyya</i>	
Pure Mathematics	
Fundamental Solutions to the Laplacian in Plane Domains Bounded by Ellipses	293
<i>H. Begehr</i>	
A Nice Representation for a Link Between Bernstein-Durrmeyer and Kantorovich Operators	312
<i>Margareta Heilmann and Ioan Raşa</i>	
Construction of Fractal Bases for Spaces of Functions	321
<i>María A. Navascués, María V. Sebastián, Arya K.B. Chand, and Saurabh Katiyar</i>	
Infinite Matrices Bounded on Weighted c_0 Space	331
<i>Riddhick Birbonshi, Arnab Patra, and P.D. Srivastava</i>	
Mapping Properties of One Class of Quasielliptic Operators	339
<i>Gennadii Demidenko</i>	
\mathcal{I}_λ -double Statistically Convergent Sequences in Topological Groups	349
<i>Ekrem Savaş</i>	
Superconvergence Results for Volterra-Urysohn Integral Equations of Second Kind	358
<i>Moumita Mandal and Gnaneshwar Nelakanti</i>	
Derivations on Lie Ideals of Prime Γ -Rings	380
<i>Kalyan Kumar Dey, Akhil Chandra Paul, and Bijan Davvaz</i>	
λ_d -Statistical Convergence, λ_d -statistical Boundedness and Strong $(V, \lambda)_d$ -summability in Metric Spaces	391
<i>Emine Kayan and Rifat Çolak</i>	

On Γ -rings with Permuting Skew Tri-derivations	404
<i>Kalyan Kumar Dey, Akhil Chandra Paul, and Bijan Davvaz</i>	
Improvement of Analytical Solution to the Inverse Truly Nonlinear Oscillator by Extended Iterative Method	412
<i>B.M. Ikramul Haque, Md. Asifuzzaman, and M. Kamrul Hasan</i>	
Author Index	423

Mathematics and Computing

Third International Conference, ICMC 2017, Haldia,
India, January 17-21, 2017, Proceedings

Giri, D.; Mohapatra, R.N.; Begehr, H.; Obaidat, M.S.
(Eds.)

2017, XX, 424 p. 51 illus., Softcover

ISBN: 978-981-10-4641-4