2019 International Conference on Computing, Power and Communication Technologies (GUCON 2019)

New Delhi, India
27 – 28 September 2019

Pages 1-491

IEEE Catalog Number: CFP19N57-POD
ISBN: 978-1-7281-0017-3

Copyright © 2019, Galgotias University
All Rights Reserved

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number: CFP19N57-POD
ISBN (Print-On-Demand): 978-1-7281-0017-3
ISBN (Online): 978-93-5351-098-5

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

Paper Presentation

Chapter No: 1 **1-7**
DermaMeth: Human DNA Methylation Database for Genes Associated with Dermatological Disorders
Mottadi Shiva, Isha Sharma, Rajkumar Chakraborty and Yasha Hasija

Chapter No: 2 **8-13**
Performance Analysis of Discrete and Continuous Mode PSS in PHILLIPH-HEFFRON Model
Mahendra Bhadu, Arvind Kumar, Naved Ismaill Chouhan, Hukam Chand Kumawat and S.K. Bishnoi

Chapter No: 3 **14-20**
Analysis of sampling frequency of discrete mode stabilizer in modern power system
Arvind Kumar, Mahendra Bhadu, Hukam Chand Kumawat, S.K. Bishnoi and Kamal Swami

Chapter No: 4 **21-24**
Ultra Low Power Self-Resonating Boost Converter
Tejas Gujrati and P. Getzial Anbu Mani

Chapter No: 5 **25-30**
Power Quality Improvement in Hybrid Power System Using Synchronous Reference Frame Theory based Distribution Static Compensator with Battery Energy Storage System
Om Prakash Mahela, Sunil Agarwal and Neeraj Kumar Saini

Chapter No: 6 **31-34**
New Key Performance Indicators (KPI) For Substation Maintenance Performance
Nvpr Durga Prasad and Chebiyam Radhakrishna

Chapter No: 7 **35-40**
Robust Second Order Sliding Mode Current Controller for VSC Interfaced Diesel generator and Battery Energy Storage based DC Microgrid
Rishi Sharma and Sukumar Mishra

Chapter No: 8 **41-46**
A Novel Scheme for Supervising Third Zone Distance Relay Operation during Power Swings
Munukutla Naga Chaitanya and Gadi Venkata Siva Krishna Rao

Chapter No: 9
MethARD: Human DNA Methylation Database for Genes Associated with Agerelated Disorders **47-52**
Mottadi Shiva, Neha Kumari and Yasha Hasija

Chapter No: 10 **53-57**
Evolution and Development of Wireless Communication System
Vishakha Yadav, Lalit Kumar and Pradeep Kumar

Chapter No: 11 **58-62**
Analysis And Comparison of Various Fully Homomorphic Encryption Techniques
Pratibha Chaudhary, Ritu Gupta, Abhilasha Singh and Pramathesh Majumder

Chapter No: 12 **63-68**
Path Planning and Controlling of Omni-Directional Robot Using Cartesian Odometry and PID Algorithm
Tejas Chaudhari, Mayank Jha, Rohit Bangal and Ganesh Chincholkar

Chapter No: 13 **69-74**
Mixed Multilevel Inverter Topology for High Power Medium Voltage Applications
Moneshwar Sutar, D. S. More and Arbind Kumar

Chapter No: 14 **75-81**
Nonlinear controllability and observability analysis of DC-DC boost converter using Lie Algebra
Debanjana Bhattacharyya and Kishor Chandra Pati

Chapter No: 15 **82-88**
Gm/ID method based low-power, low-noise Pre-amplifier design for EEG
Lipika Gupta, Amod Kumar and Sartajvir Singh

Chapter No: 16 **89-92**
Memristor Based Oscillator
Ankit Anand, Bhawna Aggarwal and Kunwar Singh

Chapter No: 17 **93-98**
Question Independent Automated Code Analysis and Grading using Bag of Words and Machine Learning
Kaushal Rai, Bhavya Gupta, Pardeep Shokeen and Pinaki Chakraborty

Chapter No: 18 **99-105**
Estimation of Maximum Penetration Level of Solar PV and its Enhancement by STATCOM
Sreena Sreekumar and Savier. J.S

Chapter No: 19 **106-109**
High Speed and Low Power SRAM Cell with Dynamic Feedback Control
Neeraj Mishra and Shweta Gautam

Chapter No: 20 **110-114**
Evaluation of Collaborative Filtering Based Recommender Systems against Segment-Based Shilling Attacks
Saumya Bansal and Niyati Baliyan

Chapter No: 21 **115-120**
Signal quality enhancement for Power and Spectrum efficient OFDM based communication
Manali Dewal and Meenakshi Rawat

Chapter No: 22 **121-126**
OFF-GRID Hybrid Online Solar Power Conditioning Unit for Domestic Purposes
Mohit Chaudhari, Kamal Babu, Swapnil Khubalkar and Shreyas Talokar

Chapter No: 23 **127-131**
The Classification of Galaxy Images Using Neural Network Algorithm
Marjan Kuchaki Rafsanjani, Hashem Bagherinezhad and Ranbir Singh Batth

Chapter No: 24 **132-138**
Leveraging on Gamification and Learning Analytics for Improved Student Learning
Dhiraj Upadhyaya and Anchal Garg

Chapter No: 25 **139-143**
FGMOS based Gain Tunable, Low Power OTRA Circuit
Priyanka Prasad, Shweta Gautam and Bhawana Aggarwal

Chapter No: 26 **144-146**
Prioritizing Software Process Models Using AHP Methodology
Dayanand Gaur and Anurag Dixit

Chapter No: 27 **147-153**
FTDMA based MAC Protocol for Throughput Enhancement in M2M Networks
Devesh Tyagi, Hari Mohan Singh and Atrey Agnihotri

Chapter No: 28 **154-156**
Design of Hexagonal Photonic Crystal Fiber with High nonlinearity and Low Confinement Loss For optical coherence tomography Application
Arpit Singh Yadav, Vijay Shanker Chaudhary, Dharmendra Kumar and Sneha Sharma

Chapter No: 29 **157-160**
An Optimal Selection of Network for Cognitive Radio- Delay Tolerant Networks (CR-DTN)
Rajneesh Agrawal, Hari Mohan Singh and Atrey Agnihotri

Chapter No: 30 **161-164**
QFGMOS Based Current Mirror with High Bandwidth and Low Input Impedance
Amit Mishra and Maneesha Gupta

Chapter No: 31 **165-170**
Analysis of Global Terrorism Dataset using Open Source Data Mining Tools
Mansi Goel, Nikitasha Sharma and Mahendra Kumar Gurve

Chapter No: 32 **171-176**
Performance Analysis of Model Predictive Control of Liquid Level Process System
Anusha Srivastava and Lal Bahadur Prasad

Chapter No: 33 **177-181**
A Novel Approach for Project's Technical and Non-Technical Skill Extraction
Kanika Bhatia, Shampa Chakraverty, Sushama Nagpal, Anupam Poddar and Mohit Lamba

Chapter No: 34 **182-187**
Ensemble Learning on Diabetes Data Set and Early Diabetes Prediction
Gulam Gaus Warsi, Sonia Saini and Sunil Kumar Khatri

Chapter No: 35 **188-192**
Linking Classroom Studies with Dynamic Environment
Kanika Tehlan, Pinaki Chakraborty, Shampa Chakerverty, Prakriti Bansal, Shikhar Agnihotri and Soumya Mohapatra

Chapter No: 36 **193-196**
Miura-Ori Fold Based Tunable Bandstop Frequency Selective Surface For Ku Band Applications
Sailabala Soren and Ashwin Kothari

Chapter No: 37 **197-201**
Performance Analysis of Routing Protocols in IoT based Wireless Sensor Networks
Anuradha Pughat, Pragyaa Sharma, Prayag Mittal and Sumanglam Bhatt

Chapter No: 38 **202-205**
Real-Time Infant-at-Risk Detection and Tracking using Faster RCNN-Based Convolution Neural Network
Okeke Stephen, Deepanjali Mishra, Mangal Sainand Jae Young Park

Chapter No: 39 **206-211**
A Framework for Detecting and Tracking Religious Abuse in Social Media
Tanvir Ahammad, Md. Khabir Uddin, Abdul Karim and Sajal Halder

Chapter No: 40 **212-216**
Fuzzy Logic based Clustering Algorithm to improve DEEC protocol in Wireless Sensor Networks
Siddhant Bagga, Nikita Chawla, Deepak Kumar Sharma and Deepika Kukreja

Chapter No: 41 **217-223**
Impact of Preferred Consideration for Fuel Cost, Emission and Bidders' Profit on Power Bidding Optimization
Debashis Palit and Niladri Chakraborty

Chapter No: 42 **224-229**
Bidirectional Power Transmission and Grid Interconnections Using Flexible Asynchronous AC Transmission Link
Imdad Ullah and M. S. Jamil Asghar

Chapter No: 43 **230-235**
Performance Analysis of Bridgeless Converter Based SMPS
Sumit Singh and Ashok Pandey

Chapter No: 44 **236-240**
Reconfigurable (H-T-E) DGS Monopole Antenna With Switchable Band Notch Characteritics for Wireless Applications
Manish Sharma and Naresh Kumar

Chapter No: 45 **241-244**
Design of Turbo Code Generator in Optical Domain using Mach-Zehnder Interferometer
Rajiv Kumar, Niranjan Kumar, Poonam Singh and Ajay Kumar

Chapter No: 46 **245-249**
Compact MIMO Diversity Antenna with Tapered Microstrip feed including 3.5/5.5GHz Band Notch Characteristics for Wireless Applications
Manoj Kapil and Manish Sharma

Chapter No: 47 **250-256**
Impact on the Transmission and Distribution Grid by the Deployment of Electric Vehicles Charging
Ankuja Jain, Hitesh R Jariwala and Uday Mhaskar

Chapter No: 48 **257-262**
FPA tuned Extended Kalman Filter for Power Quality Enhancement in PV integrated Shunt Active Power Filter
Satyavarta Kumar Prince, Kaibalya Prasad Panda, Moushumi Patowary and Gayadhar Panda

Chapter No: 49 **263-268**
Multi Microgrid Power Quality Enhancement using Distribution Power Conditioner
M.T.L. Gayatri and Alivelu Manga Parimi

Chapter No: 50 **269-273**
RTBAC: A new approach for securing Electronic Healthcare System
Ashish Singh and Kakali Chatterjee

Chapter No: 51 **274-280**
Comparative Study of Optimization Techniques for Tuning of PI Gains for Greenhouse Climate Control
Amit Sangwan, Abhinav Gupta, Divya Tiwari, Vineet Kumar and K. P. S. Rana

Chapter No: 52 **281-286**
Altitude and Attitude Control of a Quadcopter Using Linear Active Disturbance Rejection Control
Suhail Ahmad Suhail, Mohammad Abid Bazazand Shoeb Hussain

Chapter No: 53 **287-293**
Optimal Renewable Energy Resource Allocation by Three Step Optimization
Bighnaraj Panda and Anirban Ghoshal

Chapter No: 54 **294-298**
Analysis of Sampling Approach to Balance Data for Change Prediction
Ankita Bansal and Abha Jain

Chapter No: 55 **299-302**
Switchable Multiband Reconfigurable CPW-Fed Multiband Monopole Antenna for GSM1900/LTE2600/WiMAX Wireless Applications
Naresh Kumar, Pradeep Kumar and Manish Sharma

Chapter No: 56 **303-306**
An Energy Efficient Backoff Algorithm for CRN
Yash Saxena, Sohan Ram, Vinit Gupta, Palak Tripathi, Vivek Rajpoot and Vijay Shanker Tripathi

Chapter No: 57 **307-311**
Enhanced Partition-Based Method using Correlation Coefficient
Rabinder Kumar Prasad, Dr. Rosy Sarmah and Prof. Subrata Chakraborty

Chapter No: 58 **312-317**
Cyber Physical Model for the Application of Distributed Building Energy Management
Evaneet Kaur and Ashu Verma

Chapter No: 59 **318-325**
Designing of Load Frequency Controller for Two-Area Interconnected Power System using Grey Wolf Optimization
Sandeep Bhongade and Abhimanyu Patel

Chapter No: 60 **326-329**
Handwritten Marathi Character Image Recognition using Convolutional Neural Network
Bhawna Jain, Paramveer Singh and Ruchika Goel

Chapter No: 61 **330-336**
A review on Optimization Methodologies for Distribution Network Expansion Planning
Mandhir Kumar Verma, Vivekananda Mukherjee and Vinod K Yadav

Chapter No: 62 **337-342**
Comparative Analysis of Maximum Power Point Tracking Algorithms of Wind Energy Systems
Biaklian Tonsing, Shelly Vadhera and A R Gupta

Chapter No: 63 **343-349**
Control and Implementation of Bi-Directional Converter for Power Management of Unbalanced DC Microgrid
Navdeep Singh, Aditya Shukla and Mukhraj Yadav

Chapter No: 64 **350-354**
DVCCTA based high input impedance VIVO Biquad filter
Chandra Shankar, Sajai Vir Singh and Gayatri Sakya

Chapter No: 65 **355-359**
High Accurate Dual Loop Controller for Power Regulation in DAB DC-DC Converter for Solar PV Applications
Bheemraj T S, Bekkam Krishna, Karthikeyan V and Kumaravel S

Chapter No: 66 **360-366**
Emotion Classification Using Single-Channel EEG
Dr. R. Bhargavi, Har Shobhit Dayal and Kanishk Sankpal

Chapter No: 67 **367-370**
Regularized-Histogram and DWT-SVD Based Image Contrast Enhancement
Aditi Sharma and Tarun Rawat

Chapter No: 68 **371-379**
Concurrent Video Encryption and Compression for Secure Storage and Transmission
Dr.Manoj Kr. Mishra and Dr. Susanta Mukhopadhyay

Chapter No: 69 **380-384**
Design of Memristor Based Controller for Speed Control of DC Motor
Noimisha Hazarika, Pratyasha Tamuli and Anirban Sengupta

Chapter No: 70 **385-389**
Comperative Study of Different Routing Protocol for Oppertunistic IOT Applications
Shashank Singh and Dr. Veena Anand

Chapter No: 71 **390-393**
ANN Based Novel Inverted L Shape Slotted Patch Antenna For Wide Band Applications
Praveen Kumar, Palak Tripathi, Saurabh Raj and Vijay Shanker Tripathi

Chapter No: 72 **394-399**
Model Order Reduction of Non-Linear Transmission Lines using Non-linear Moment Matching.
Danish Rafiq and Mohammad Abid Bazaz

Chapter No: 73 **400-404**
A Novel ANN based Efficient Proactive Handoff Scheme for Cognitive Radio Network
Vaishali Agarwal, Abhay Kumar, Debyansh Kumar, Palak Tripathi, Vivek Rajpoot and Vijay Shanker Tripathi

Chapter No: 74 **405-410**
Algorithm for Detection of Power System Faults in the Presence of Thyristor Controlled Reactor Using Hilbert Huang Transform and Ruled Decision Tree
Ravi Kihor Ranjan, Om Prakash Mahela, Sunil Agarwal and Bhuvnesh Rathore

Chapter No: 75 **411-415**
Design and Analysis of Low Leakage SRAM cell at 45nm Technology
Akanksha Pandey, Praveen Kumar Sahu, Ankush Kumar, Lalit Chandra, R. Dwivedi and V N Mishra

Chapter No: 76 **416-423**
A New Two-limit Control Strategy of a Bearingless Motor
B Shayak

Chapter No: 77 **424-427**
Cuffless Systolic Blood Pressure Estimation Using Photoplethysmography Signal
Ananda Chatterjee, Madhuchhanda Mitra and Saurabh Pal

Chapter No:78 **428-433**
Optimized Approach for Restructuring of Rajasthan Transmission Network to Cater Load Demand of Rajasthan Refinery and Petrochemical Complex
Sandeep Kumar Lakwal, Om Prakash Mahela, Mahendra Kumar and Neeraj Kumar

Chapter No: 79 **434-441**
Analyzing Varied Approaches for Forecast of Stock Prices by Combining News Mining and Time Series Analysis
Pranav Shankar, Rajat Kaushal and Iknoor Singh

Chapter No: 80 **442-446**
Analysis Of GaN Based BLDC Motor Drive For Automotive Application
Sudhanshu Telrandhe, Dr.A.K Prakash and Dr. D.B Talange

Chapter No: 81 **447-451**
Efficient Extended Diffie-Hellman Key Exchange Protocol
Arjun Singh Rawat and Maroti Deshmukh

Chapter No: 82 **452-457**
Congestion Aware Routing in AODV Based Mobile Ad-Hoc Network (MANET)
Saumya Yadav and Tuba Firdaus

Chapter No: 83 **458-462**
Teacher Attrition Prediction Model and Analysis of the Associated Factors
Simrat Pal Singh Satia, Vandana Miglani and Varshika Gambhir

Chapter No: 84 **463-468**
Cancer-Gene Commonality Network based on Efficient Retrieval Methods
Shelly Gupta, Hardik Sharma, Yukti Sharma and Archana Purwar

Chapter No: 85 **469-474**
Non-linear Dynamic Modeling, Simulation and Control of 5-phase 10/8 Switched Reluctance Motor for Electric vehicle application
Rahul Muley, Vinodini Bhole, Ravi Maravulla and Ak Prakash

Chapter No: 86 **475-480**
Short Circuit Analysis of Electrical Distribution System for Typical Chemical Industry
Lakshmi Ghemarbhai Mahiwal, Jitendra Jamnani and Keval Velani

Chapter No: 87 **481-486**
A Transformerless Photovoltaic Inverter with Dedicated MPPT for Grid Application
Hema Chander Allamsetty, Lalit Kumar Sahu, Phani Teja Bankupalli and Manik Jalhotra

Chapter No: 88 **487-491**
Dual Input Converter Fed Transformerless Multilevel Inverter for Standalone PV Application
Hema Chander Allamsetty, Lalit Kumar Sahu and Manik Jalhotra

Chapter No: 89 **492-496**
Software Engineering for Big Data Application Development: Systematic Literature Survey Using Snowballing
Prateek Juneja and Preeti Kaur

Chapter No: 90 **497-502**
Robust Secret Sharing for Image Encryptionin Fractional Fourier Transform Domain
Sumit Singh, Rhythm Sharma, Rajib Jha, M A Rahman, Neha Bisht, Sreya Sinha, Agya Ram Verma and Yashvir Singh

Chapter No: 91 **503-507**
Design of Graphene based antenna for 5G MIMO system
Ajit Kumar Singh and Preet Kaur

Chapter No: 92 **508-513**
Improved space vector PWM techniques of the three level ZSI
Satwant Singh and Santosh Sonar

Chapter No: 93 **514-519**
A Hybrid PV-Battery Topology to Extract Maximum Power at Partial Shading Conditions for Rural /Remote Area Applications
Madhu G M, Dr C Vyjayanthi and Kolakaluri Vinay Kumar

Chapter No: 94 **520-523**
Selection Procedure of Switching Frequency for Efficiency and Power Density Maximization of 1kW Boost Converter Based Battery Discharge Regulator Using Wide Bandgap Devices
Chitra Bhandari, Sumit Kumar, Sudha Chauhan, M A Rahman, Gaurav Sundaram, Rajib Kumar Jha, Shyam Sunder, Agya Ram Verma and Yashvir Singh

Chapter No: 95 **524-530**
Efficiency and Power Density Maximization of 1kW Boost Converter Based Battery Discharge Regulator Using Wide Bandgap Devices
Gaurav Yadav and Dr. Ramkrishan Maheshwari

Chapter No: 96 **531-536**
An Efficient Approach to Solve Bus-Driver Assignment Problem
Mondira Chakraborty, Md Zahid Hassan and Md Masbaul Alam Polash

Chapter No: 97 **537-539**
EEG Signal based Seizure Classification Using Wavelet Transform
Mayank Kumar Jareda, Rajneesh Sharma and Amit Kukker

Chapter No: 98 **540-545**
Wavelet Transform Based Pneumonia Classification of Chest X-Ray Images
Nitin Singh, Rajneesh Sharma and Amit Kukker

Chapter No: 99 **546-550**
Analysis and Mitigation of Harmonics for Standard IEEE 13 Bus Test System Using ETAP
Lakshmi Ghemarbhai Mahiwal and Jitendra Jamnani

Chapter No: 100 **551-556**
3-Phase High Gain PFC Converter Implementing Switched Capacitors
G Indira Kishore and Ramesh Kumar Tripathi

Chapter No: 101 **557-562**
Performance Evaluation and Analysis of Stand-Alone Solar PV Powered Water Pumping System for Irrigation
Semahegn Shitaw, Ravi Varma Chavali and Anubrata Dey

Chapter No: 102 **563-565**
A Low Profile Ultrawide Band Antenna for WLAN/Wi-Max/C-Band Wireless applications
Maksud Alam, Mainuddin, B. K. Kanaujia, M.T. Beg and Sachin Kumar

Chapter No: 103 **566-571**
Optimal PV Placement in Village Distribution Network considering Loss Minimization and Unbalance
Bakul Kandpal, Diksha Kumari, Jitendra Kumar and Ashu Verma

Chapter No: 104 **572-577**
Energy Analysis of Smart Lighting System Considering Visual Comfort of Occupants for Educational Building
Manish Kumar Yadav, Apoorva Rampal, Ashu Verma and Bijaya Ketan Panigrahi

Chapter No: 105 **578-582**
Design of Isolated Auxiliary AC-DC Converter Meeting Level VI Energy Efficiency Norms
Aman Jha

Chapter No: 106 **583-588**
SRAM Issues and Scrutiny at 45nm having Low Leakage Power and Leakage Current
Manoj Sharma and Apaar Gupta

Chapter No: 107 **589-592**
Optimal Perturbation MPPT Technique for Solar PV System using Grey Wolf Optimization
Urvashi Chauhan, Bhavnesh Kumar, Asha Rani and Vijander Singh

Chapter No: 108 **593-599**
Novel Tree Based Priority Encoder Design Technique
Jagrit Kathuria and Manoj Sharma

Chapter No: 109 **600-604**
Performance Optimization of Digital CMOS Integrated Circuits using LE Theory and APSO
Ravi Kukreti and Kunwar Singh

Chapter No: 110 **605-610**
Automated Transistor Sizing of Digital Integrated Circuits using LE theory and Firefly Algorithm
Nupur Pandey and Kunwar Singh

Chapter No: 111 **611-615**
Referenceless Full Reference Image Quality Metric Estimation for Embedded Codec
Md Amir Baig, Athar A. Moinuddin and Ekram Khan

Chapter No: 112 **616-621**
Predictability and Analysis of Weekly Temperature using Autoregressive Time Series Models
Sukhpal Kaur and Madhuchanda Rakshit

Chapter No: 113 **622-627**
Non–Uniform Norm Based Minimum Error Entropy Algorithm in Sparse System Identification
Rajni Yadav and Chandra Shekhar Rai

Chapter No: 114 **628-633**
Volume Estimation of Non-axisymmetric Fruits and Vegetables using Image Analysis
Susovan Jana, Ranjan Parekh and Bijan Sarkar

Chapter No: 115 **634-639**
Modeling and Control of a Cascaded H-bridge Multilevel Inverter for a Hybrid Generation Sources based Islanded Microgrid
Akshit Samadhiya and Dr. Kumari Namrata

Chapter No: 1116 **640-644**
Hyper Optimised Molecular subtype prediction of Breast Cancer
Anoushka Jain, Mridul Wadhwa and Anchal Garg

Chapter No: 117 **645-649**
Genetic Algorithm Based Optimized Routing Methodology through Big Data Analytics in MANET
Satarupa Biswas, Siddhartha Biswas, Sherin Zafar and Mohd. Abdul Ahad

Chapter No: 118 **650-656**
Analysis and Prediction of Suicide Attempts
Adeeshwar Jain, Shilpa Gupta, Apoorv Jain, Tarun Agarwal and Anshul Dhawan

Chapter No: 119 **657-662**
On High Frequency Analysis of Gm-boosted High Performance Flipped Voltage Followers with Very Low Output Impedance
Urvashi Singh, Richa Srivastava and Devesh Singh

Chapter No: 120 **663-666**
Synchronization of Fractional Order Chaotic Systems using Non-Linear Control Scheme
Rahul Joshi and Himesh Handa

Chapter No: 121 **667-672**
An Extension of Interleaved hybrid Converter for concurrently DC and AC Output
Pankaj Kore and D.S. More

Chapter No: 122 **673-677**
Displacement Control of an Electro- Hydraulic Actuator using Proportional Solenoid Valve
Rishav Kumar Gupta, Lokesh Kumar and Nimai Pada Mandal

Chapter No: 123 **678-684**
Maximum Power Point Tracking with PV fed Switched Inductor Topology DC-DC Converter
Pavan Prakash Gupta and Ramesh Kumar Tripathi

Chapter No: 124 **685-690**
Dichotomic Prediction of an Event Using Non Deterministic Finite Automata
Punitha Ilayarani, Celine John and Maria Dominic

Chapter No: 125 **691-696**
Day Ahead Bi-Level Direct Load Control in Smart Residential Apartment Building: A Stackelberg Game Approach
Subho Paul, Narendra Babu Y and Narayana Prasad Padhy

Chapter No: 126 **697-702**
Design and Simulation of LTE Prototype Filter for Filter Bank Multicarrier (FBMC) System
Raghunadh M V, Radha Revathi Gullapalli, Harshali R Jagtap and Neelima Singh

Chapter No: 127 **703-707**
State of Charge Estimation of Ultracapacitors Based on a Fractional Order Calculus
Dhananjay Rao Kuna and Subhojit Ghosh

Chapter No: 128 **708-712**
Experimental Validation of SISO, SIMO, MISO, and MIMO Techniques Using C-700 Software Defined Radio Platform
Nandkishor Joshi, Suneel Yadav and S. C. Sharma

Chapter No: 129 **713-718**
Comparative Study of Conventional PD and Fuzzy PD Controller for Non-linear Active Suspension System
Sukhsagar Misra, Vineet Kumar and K. P. S. Rana

Chapter No: 130 **719-724**
Minimization of Impact of Disturbances on Performance of Utility Grid with Wind Energy Penetration Using Battery Energy Storage Device
Virendra Sharma and Lata Gidwani

Chapter No: 131 **725-730**
Improvement in QoS of MANET Routing by finding optimal route using Mobile Agent paradigm and Intelligent Routing Decision using Fuzzy Logic Approach
Vandna Verma

Chapter No: 132 **731-735**
Hyper Smoothing Function based Edge Detection for Prediction of Fat Content in Marble Meat
Navdeep, Singh Vijander, Rani Asha and Goyal Sonal

Chapter No: 133 **736-741**
Reliability Improvement of a Radial Distribution System with Recloser Placement
Mohammad Zaid, Afroz Alam, Hira Sultan, Salman Khan, Shahid Junaid Ansari and Mustafa Sarwer

Chapter No: 134 **742-747**
Design and Implementation of System Protection Scheme for Kawai-Kalisindh-Chhabra Thermal Complex in Rajasthan, India
Deepak Kumar Sharma, Om Prakash Mahela and Sunil Agarwal

Chapter No: 135 **748-752**
Model of Smart Gas Sensors with the Application of Neural Network for the Detection of Gases Active in Dynamic Environment
Nameesha Chauhan and Shabana Urooj

Chapter No: 136 **753-758**
Application of Balancing Techniques with Ensemble Approach for Credit Card Fraud Detection
Shweta Taneja, Bhawna Suri and Chirag Kothari

Chapter No: 137 **759-763**
Performance analysis of three phase voltage source inverter using PWM and SPWM techniques
Vijay Shankar, Ankur Kumar and Amar Nath Tiwari

Chapter No: 138 **764-768**
Realization of Memristor based D-Latch
Rajesh, R Arundeepakvel, Jatin, Parth Khatter and Neeta Pandey

Chapter No: 139 **769-773**
Design of a SHA-2 Hash Based Image Encryption Scheme using 1D chaotic systems and DNA sequences
Kirtee Panwar, Ravindra Purwar and Anchal Jain

Chapter No: 140 **774-779**
Economic Load Dispatch with Renewable Uncertainties using PSO
Pawan Kumar Maurya, Parvez Ahmad, Tarun Varshney, Nitin Singh and Navneet Kumar Singh

Chapter No: 141 **780-785**
Design and Analysis of Enhanced Gain Buck-Boost Converter
Mummadi Veerachary and Malay Ranjan Khuntia

Chapter No: 142 **786-791**
Voltage-Multiplier based Z-Source DC-DC Boost Converter: Analysis and Design
Mummadi Veerachary and Punit Kumar

Chapter No: 143 **792-795**
Time Series Prediction of PM 2.5 Level in Delhi
Arjun Kumar Shah, Anurag Bahadur Singh, Ankur Dahiya and Dr. Umang Soni

Chapter No: 144 **796-803**
Deep Learning with Convolutional Neural Network for Controlling Human Arm Prosthesis using sEMG signals
Harshit Malhotra, Mridul Sharma, Neeraj Kumar and Dr. Jyoti Yadav

Chapter No: 145 **804-810**
Enhanced Distributed Distributive Justice Algorithm for Resource Allocation Problem
Mehul Parmar and Gaurav Katariya

Chapter No: 146 **811-816**
Improved Droop Control Strategy for Single Phase Micro-Grid Inverters in Stand-Alone Mode.
Santanu Bera, Dipak Mandal and Sumana Chowdhuri

Chapter No: 147 **817-822**
Robust Control of Cart-Inverted Pendulum System Using Fractional Order (FO) Controller
Reetam Mondal and Jayati Dey

Chapter No: 148 **823-826**
Wideband Microwave Equalizer with Asymmetric Parabolic Gain-Slope for Airborne Applications
Vipin Kumar, Satish Jhariya, Jayasheela C S, Mahadev Sarkar, Sivakumar R and Shailendra Singh

Chapter No: 149 **827-831**
Identifying synonyms in bigram phrases using Compositional DSM and Artificial Neural Network
Komal Maheshwari, Jeena Kleenankandy and Abdul Nazeer

Chapter No: 150 **832-836**
A Review of Three Phase to Seven Phase Converter Transformer
Md. Tabrez, PK Sadhu, Atif Iqbal and Farhad Ilahi Bakhsh

Chapter No: 151 **837-844**
Joint Wireless Charging and Data Collection using Mobile Element for Rechargeable WSNs
Sanjai Prasad Banoth, Divya Singh and Tarachand Amgoth

Chapter No: 152 **845-852**
Mobile Charger Scheduling using Partial Charging Strategy for Rechargeable WSNs
Prasannababu Devarapalli, Shubham Vaishnav and Tarachand Amgoth

Chapter No: 153 **853-856**
Design and Development of Solar Umbrella Based on Peltier Effect
Naveenkumar Marati, Chintakindi Sandhya, Haarica V, Saarang Gaggar and Tarun Kumar Reddy

Chapter No: 154 **857-866**
Remote Code Execution using ICMP Modified Structured Storage Covert Channels Without Elevation of Privileges
Aditya T

Chapter No: 155 **867-870**
Ranking Web Pages Using Cosine Similarity Measure
Shadab Irfan and Subhajit Ghosh

Chapter No: 156 **871-875**
Euclidean Detector Based Cyber Attack Detection in Automatic Generation Control
Neetu Kumari and Gauri Shankar

Chapter No: 157 **876-879**
Three Phase Transformerless Cascaded H-Bridge Solar PV Multilevel Inverter
Saad Nazif Ahamad Faruqui, Kushal Anand and Asif Ali

Chapter No: 158 **880-891**
Performance Evaluation of Energy Efficient Power Models for Different Scheduling Algorithms in Cloud using Cloud Reports
Soumya Ranjan Jena, Sukant Kishoro Bisoy and Bhushan Dewan

Chapter No: 159 **892-897**
EEG Controlled Bionic Arm
S Sree Krishna, V Ramnath and Anjan Kumar Dash

Chapter No: 160 **898-903**
Intelligent Trainer for Athletes using Machine Learning
D.A. Attigala, R. Weeraman, W.S.S.W Fernando, M.M.S.U Mahagedara, M. P. A.W. Gamage and T. Jayakodi

Chapter No: 161 **904-909**
Telugu OCR using Dictionary Learning and Multi-Layer Perceptrons
Madhuri Gadwal, Neela Lohita Kashyap Modali and Atul Negi

Chapter No: 162 **910-915**
Music similarity mapping through Fundamental Frequencies by Coefficient of Concurrent Deviation
Sudipta Chakrabarty, Sayantan Chatterjee, Md Ruhul Islam and Hkd Sarma

Chapter No: 163 **916-923**
Comparative Analysis of Aperture Antennae and Microstrip Patch Antennae
Manavi Shukla, Tushit Gupta and Amit Tiwari

Chapter No: 164 **924-928**
Active Solar Tracking System Using Node MCU
Joysonkho Ghosh, Naiwrita Dey and Pabak Das

Chapter No: 165 **929-935**
AWILOG Based Control for Grid-Tied PV System Under Weak Grid Conditions
Abhishek Kumar, Seema Kewat, Bhim Singh and Rashmi Jain

Chapter No: 166 **936-941**
Power Quality Improvement in PV System Tied to Weak Grid
Vandana Jain and Bhim Singh

Chapter No: 167 **942-946**
Study to Analyze the Impact of Fixed Trap Charges on the Performance of Germanium Ferroelectric Double Gate FET (GeFeDGFET)
Monika Bansal and Harsupreet Kaur

Chapter No: 168 **947-952**
Fast and Robust Control for Power Management and Power Quality Improvement in Islanded Microgrid
Seema Kewat and Bhim Singh

Chapter No: 169 **953-958**
Realization of Visible Light Communication approach with Power LED and Solar panel
Sudhir Keshari, Ravi Gupta and Raghav Bhargav

Chapter No: 170 **959-964**
Bridgeless Isolated Zeta-Luo Converter Based EV Charger with PF Pre-regulation
Radha Kushwaha and Bhim Singh

Chapter No: 171 **965-968**
Impact of Differential Gain and Phase Variations on Onboard Non-null Monopulse Antenna Tracking System
Pankaj Kr Gupta

Chapter No: 172 **969-974**
Analysis of Signal for Determination of Crack Distance from Acoustic Emission Sensor of a Steel Bridge
Arpita Mukherjee, Abhishek Maurya, Pratap Karmakar and Partha Bhattacharjee

Chapter No: 173 **975-980**
De-rated MPPT Scheme for Grid Integrated Solar PV Energy Conversion System
Susree Sukanya Satapathy and Nishant Kumar

Chapter No: 174 **981-987**
A Hierarchical Approach to Extract Application Logs with Visualization in a Containerized Environment
Sharad Jash, Purva Shah, R Ganesh and Tasmay Rachhadia

Chapter No: 175 **988-994**
Cost-Effective Solar Powered Battery Charging System for Light Electric Vehicles (LEVs)
Kamal Singh, Anjanee Kumar Mishra, Bhim Singh and Kuldeep Sahay

Chapter No: 176 **995-1000**
Combined IIR and FIR Filter for Improved Power Quality of PV Interfaced Utility Grid
Pavitra Shukl and Bhim Singh

Chapter No: 177 **1001-1007**
LRNeuNet: An attention based deep architecture for lipreading from multitudinous sized videos
Mahua BhattacharyaAyushi Rastogi, Ritika Agarwal, Vishakha Gupta and Joydip Dhar

Chapter No: 178 **1008-1014**
Solar PV-Battery Microgrid for Three Phase Four Wire AC Distribution System
Gaurav Modi and Bhim Singh