

2020 IEEE International Women in Engineering (WIE) Conference on Electrical and Computer Engineering (WIECON-ECE 2020)

**Bhubaneswar, India
26-27 December 2020**



**IEEE Catalog Number: CFP20D97-POD
ISBN: 978-1-6654-3027-2**

**Copyright © 2020 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. 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:	CFP20D97-POD
ISBN (Print-On-Demand):	978-1-6654-3027-2
ISBN (Online):	978-1-6654-1917-8

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

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

A UNIQUE 48-PULSE PASSIVE RECTIFIER FOR HARMONICS COMPENSATION.....	1
<i>Md. Shoaib Akther, Faria Afreen Nishat, Md. Morshed Alam, Rehana Parvin Mou, Md. Sabbur Ali</i>	
AN ARTIFICIAL INTELLIGENCE BASED RAINFALL PREDICTION USING LSTM AND NEURAL NETWORK.....	5
<i>Imrus Salehin, Iftakhar Mohammad Talha, Md. Mehedi Hasan, Sadia Tamim Dip, Mohd. Saifuzzaman, Nazmun Nessa Moon</i>	
NIDF: AN ENSEMBLE-INSPIRED FEATURE LEARNING FRAMEWORK FOR NETWORK INTRUSION DETECTION	9
<i>Suman Nandi, Satanu Maity, Madhurima Das</i>	
A BRIEF STUDY AND ANALYSIS OF NOMA TECHNIQUES FOR 5G.....	13
<i>Rupayali Swaroop, Arun Kumar</i>	
DESIGN AND IMPLEMENTATION OF AN IOT BASED MEDICAL ASSISTANT ROBOT (AIDO-BOT).....	17
<i>Md. Anowar Hossain, Md Ebrahim Hossain, Md. Jashim Uddin Qureshi, Md. Abu Sayeed, Md. Azim Uddin, Umme Afifa Jinan, Md. Azad Hossain</i>	
AUTOMATIC IDENTIFICATION OF DRIVER INATTENTIVENESS USING CONVOLUTIONAL NEURAL NETWORKS.....	21
<i>Md. Rakibul Islam, Abdul Matin, Toshiba Kamruzzaman</i>	
A PROTOTYPE MODEL FOR VIRTUAL TRAFFIC LIGHT MAINTENANCE USING AIS.....	25
<i>Jagrati Gohania, D. K. Lobiya</i>	
JOM AUGMENTED REALITY EFFECT TOWARDS ONLINE SHOPPING PLATFORMS	29
<i>W. J. Liew, P. S. Josephng, H. C. Eaw, K. Y. Phan</i>	
JOM LINERAPY: THERAPIST ON YOUR PALM.....	33
<i>Y. Y Tan, P. S. Josephng, H. C. Eaw, K. Y. Phan</i>	
NEARLY INFINITESIMAL TRIAL ANALYSIS ALGORITHM: A MACHINE LEARNING APPROACH TOWARDS PROBABILITY	39
<i>Jahanavi Sanda, Mellacheruvu Janakirama Sarma, Jyoshnavi Sanda, Nguyen Thi Dieu Linh, Rahul Cherukuri</i>	
TRANSMISSION LINES MANAGEMENT SYSTEM FOR SMART GRIDS.....	44
<i>Abhishek S, Abhinav G A, Abhishek Kumar M, Pushpa Mala S</i>	
DESIGN, SIMULATION AND ANALYSIS OF SWASTIKA SHAPE UNIPLANAR ACS FED ANTENNA FOR MULTIPLE FREQUENCY BAND OPERATION.....	48
<i>Praveen Vummadisetty. Naidu, Arvind Kumar, R. Raj Kumar, V. Neelima, Sai Haranadh Akkapanthula, Khalim Amjad Meerja</i>	
DESIGN AND ANALYSIS OF COMPACT PENTAGONAL HYBRID PLASMONIC NANO-ANTENNA.....	52
<i>M. Tejasree, Praveen Vummadisetty Naidu, Sai Haranadh Akkapanthula, V. Neelima, Arvind Kumar, Khalim Amjad Meerja</i>	

A NOVEL COMPACT CIRCULAR HYBRID PLASMONIC NANO-ANTENNA FOR OPTICAL APPLICATIONS.....	56
<i>M. Tejasree, Praveen Vummadisetty Naidu, Sai Haranadh Akkapanthula, V. Neelima, Arvind Kumar, Khalim Amjad Meerja</i>	
CONTROL ANALYSIS OF STATIONARY REFERENCE FRAME BASED CURRENT CONTROLLER FOR A GRID TIED INVERTER BASED DISTRIBUTED GENERATION	60
<i>Kumari Namrata, Akshit Samadhiya, Akash Satla, Pavan Kumar Guntupally, Sai Nishanth Yelamarthy</i>	
AN EFFECTIVE FACIAL EXPRESSION RECOGNITION SYSTEM	66
<i>Sushanta Roy Supta, Md. Rifath Sahriar, Md. Golam Rashed, Dipankar Das, Rubaiyat Yasmin</i>	
UI/UX DESIGN OF EDUCATIONAL GAME FOR EARTHQUAKE MITIGATION	70
<i>Nm Anita Belinda, Linawati, Komang Oka Saputra</i>	
DESIGN AND IMPLEMENTATION OF HIGH-SPEED LOW VOLTAGE 4X4 VEDIC CONVOLUTOR	74
<i>Shreya Bhattacharyya, Souvik Majumder, Papiya Debnath, Manash Chanda</i>	
ENERGY EFFICIENT AND OPTIMIZED MAKESPAN WORKFLOW SCHEDULING ALGORITHM FOR HETEROGENEOUS RESOURCES IN FOG-CLOUD-EDGE COLLABORATION	78
<i>Jyoti Bisht, V. V. Subrahmanyam</i>	
PERFORMANCE AND ANALYSIS OF ADAPTABLE PI AND SMC FOR A HYBRID PV-BATTERY SYSTEM.....	84
<i>Bhanulatha Bora, Satish Kumar Gudey</i>	
A WEARABLE DEVICE USED FOR SMART DOORBELL IN HOME AUTOMATION SYSTEM	90
<i>Abdul Basit, Komal Saxena, Ajay Rana</i>	
TOWARDS THE PORTABILITY OF A CAPACITIVE-SENSOR BASED NON-INVASIVE GLUCOMETER: A SIMULATION APPROACH.....	94
<i>Maisha Tabassum Rahamoni, Sohan Kabir, Md. Himel Parvez, Shariful Islam, Md. Iqbal Bahar Chowdhury</i>	
A SINGLE INDUCTOR, SINGLE SWITCH HIGH GAIN DC-DC BOOST CONVERTER	98
<i>Shahrukh Khan, Arshad Mahmood, Mohammad Zaid, Mohd Tariq, Shima Sadaf</i>	
DESIGN AND IMPLEMENTATION OF FULL SUBTRACTOR USING DIFFERENT ADIABATIC TECHNIQUES	102
<i>Minakshi Sanadhya, Devendra Kumar Sharma</i>	
A CRITICAL STUDY OF THE RELATION OF EMOTION AND STRESS FROM THE SUPRASEGMENTAL FEATURES OF AN ASSAMESE EMOTIONAL SPONTANEOUS SPEECH	107
<i>Sippee Bharadwaj, Purnendu Bikash Acharjee</i>	
UTILIZATION OF THIN-FILM TO CONTROL TOTAL PHASE SHIFT DURING TOTAL-INTERNAL-REFLECTION	113
<i>Moumita Saha, Sumita Deb, Bhaswati Medhi, Minakshi Deb Barma</i>	

DIFFERENT CONVOLUTION NEURAL NETWORK BASED MODELS FOR GARBAGE DETECTION: A REVIEW	117
<i>Vishal Verma, Harsha Chauhan, Deepali Gupta, Sheifali Gupta</i>	
A DOMAIN CLASSIFICATION-BASED INFORMATION RETRIEVAL SYSTEM.....	122
<i>Soumya Priyadarsini Panda, Jasaswi Prasad Mohanty</i>	
FUTURE CITY OF BANGLADESH: IOT BASED AUTONOMOUS SMART SEWERAGE AND HAZARD CONDITION SHARING SYSTEM	126
<i>Md. Mosfikur Rahman, Mohammad Abul Kashem, Mohammad Mohiuddin, Mohammad Alam Hossain, Nazmun Nessa Moon</i>	
MULTIMODAL MEDICAL IMAGE FUSION BASED ON INTUITIONISTIC FUZZY SETS	131
<i>Berhan Oumer Adame, Ayodeji Olalekan Salau, Bangi Chinna Subbanna, Talari Tirupal, Shaik Fowzia Sultana</i>	
DEPRESSION RISK PREDICTION AMONG TECH EMPLOYEES IN BANGLADESH USING ADABOOSTED DECISION TREE	135
<i>J. M. Intinan Uddin, Kaniz Fatema, Pranab Kumar Dhar</i>	
OPTIMIZATION OF THE GROWTH CONDITIONS OF CU ₂ O THIN FILMS AND SUBSEQUENT FABRICATION OF CU ₂ O/ZNO HETEROJUNCTION BY M-SILAR METHOD.....	139
<i>Shanta Majumder, Nazmul Islam Tanvir, Bijoy Chandra Ghos, Md Abdul Majed Patwary, Mohammad Atiqur Rahman, Md. Alauddin Hossain, Syed Farid Uddin Farhad</i>	
PERFORMANCE ASSESSMENT OF ATMOSPHERIC SOILING DUST ON SPV TECHNOLOGY FOR COMPOSITE CLIMATE.....	143
<i>Supriya Rai, Rajesh Khanna, Birinchi Bora, Siddhartha Singh, Sachin Jain, Chandan Banerjee</i>	
HAND-DRAWN EMOJI RECOGNITION USING CONVOLUTIONAL NEURAL NETWORK	147
<i>Mehnika Akter, Mohammad Shahadat Hossain, Karl Andersson</i>	
AUTOMIZER-AN AUTOMATIC SANITIZER DISPENSER	153
<i>Anandu Ajayan, Sunitha Beevi. K</i>	
BIBLIOMETRIC ANALYSIS OF MOOC USING BIBLIOMETRIX PACKAGE OF R	157
<i>Ramneet, Deepali Gupta, Mani Madhukar</i>	
A DIFFERENTIAL EVOLUTION TUNED NONLINEAR BACKSTEPPING CONTROLLER FOR THREE-PHASE GRID-CONNECTED PHOTOVOLTAIC SYSTEM	162
<i>Aditi Panwar, Rajesh Kumar, M. A. Mahmud, Akash Saxena</i>	
DG PENETRATION ANALYSIS ON THE LOCATIONAL MARGINAL PRICING: A CASE STUDY OF INPS	166
<i>Birat Sharma, Menaka Karki, Shahabuddin Khan, Bidhan Pokhrel</i>	
ELECTROMAGNETIC CHARACTERISTICS OF CARBON FIBER BASED MICROWAVE ABSORBER FOR FIXED MOBILE FSS BAND	170
<i>Ashish Raj, Nisha Gupta</i>	
A COMPARATIVE RECAPITULATING STUDY OF RECENT SENTIMENT ANALYSIS APPROACHES	173
<i>Atulya Gupta, Rajendra Prasad Mahapatra</i>	

A DEEP TRANSFER LEARNING APPROACH TO DIAGNOSE COVID-19 USING X-RAY IMAGES.....	177
<i>Nagifa Ilma Proga, Mohammad Shahadat Hossain, Karl Andersson</i>	
FREQUENCY RESPONSE STUDY IN MICROGRID SYSTEM WITH DISTRIBUTED GENERATION HAVING REDUCED INERTIA	183
<i>Jishu Mary Gomez, Prabhakar Karthikeyan Shanmugam</i>	
DESIGN AND IMPLEMENTATION OF A MODIFIED AES CRYPTOGRAPHY WITH FAST KEY GENERATION TECHNIQUE	191
<i>Sadi Arman, Tanjila Rehnuma, Mahfuzur Rahman</i>	
HENNAGAN: HENNA ART DESIGN GENERATION USING DEEP CONVOLUTIONAL GENERATIVE ADVERSARIAL NETWORK (DCGAN)	196
<i>Sayed Samia Nasrin, Risul Islam Rasel</i>	
IMPEDANCE BUS MATRIX FORMATION USING BUS BUILDING ALGORITHM FOR POWER SYSTEM ANALYSIS.....	200
<i>Alapati Sai Lakshmi Sravya, Lingamsetty Naga Yoshita, Bheemavarapu Durga Divya Reddy, Sailaja V, Manitha P. V, Deepa K</i>	
DISCRETE-TIME PROPORTIONAL DERIVATIVE CONTROLLER FOR WIRELESS NETWORKED CONTROL SYSTEM WITH NETWORK CONSTRAINTS	206
<i>Krutika Paradkar, Dipesh Shah</i>	
AN INSIGHT INTO DOMESTIC POWER MONITORING	211
<i>Niloy Sarker, Ifran Kabir, Peuly Saha, Sazzed Mahamud Khan, Apurba Kumar Saha, Abu Hena Shatil</i>	
EXTRACTION OF DMTL EQUIVALENT CIRCUIT PARAMETERS USING SMP SO.....	215
<i>Amit K. Sahu, Rajeev K. Parida, Rashmirekha K. Mishra, Deepak K. Naik, Dhruva C. Panda</i>	
E2BEAM: ENERGY EFFICIENT BEAM ALLOCATION IN 5G HETNET USING COOPERATIVE GAME.....	219
<i>Subha Ghosh, Debashis De, Priti Deb</i>	
MEDICAL IMAGE FUSION EMPLOYING ENHANCEMENT TECHNIQUES	223
<i>Bandana Pal, Surya Mahajan, Shruti Jain</i>	
EFFICIENT IOT BASED WEATHER STATION	227
<i>Abu Saleh Bin Shahadat, Safial Islam Ayon, Most. Rokeya Khatun</i>	
UTILIZATION OF FILTERED BACK PROJECTION AND COMPRESSIVE SENSING METHODS ON MICROWAVE TOMOGRAPHY AND ITS COMPARATIVE ANALYSIS	231
<i>Dian Kurnia Imanda, Achmad Munir</i>	
MVOTE: A MOBILE VOTING SYSTEM TO CONDUCT ELECTION DURING COVID-19 PANDEMIC	235
<i>Shahriar Rahman Khan, Md. Rezwan-A-Rownok, Sharmila Rahman Prithula, Fahmida Yasmin Rifat, Noor Nafiz Islam, Muhammad Nazrul Islam</i>	
DEGRADATION OF PV MODULE PERFORMANCE DUE TO DUST ACCUMULATION ON THE HIGH-RISE BUILDINGS	239
<i>Sumaiya Akter, Md. Mehedi Hasan Shawon, Md. Kamrul Islam, Sabbir Ahmed, Md. Mosaddequr Rahman</i>	

ADAM- ANXIETY DETECTION AND MANAGEMENT: A SOLUTION TO MANAGE ANXIETY AT WORKPLACES AND IMPROVE PRODUCTIVITY	243
<i>Dilara Mannapperuma, Abarnah Kirupananada</i>	
ASSESSMENT OF SEVERITY OF IMPACT ON HUMAN WITHIN THE PROXIMITY TO A FOSSIL FUEL POWER PLANT	247
<i>Abdullah Al Monsur, Atika Rahman, Farseem M. Mohammedy</i>	
ACCURACY ANALYSIS OF TRANSMISSION PHASE-SHIFT METHOD FOR MATERIAL CHARACTERIZATION.....	251
<i>Sulistyaningsih, Rizki Putra Prastio, Zulfi, Achmad Munir</i>	
A TOOL TO ESTIMATE REMAINING LIFE OF OVERHEAD LINE CONDUCTORS.....	255
<i>Tasnima Afsana, Rezaul Karim Shanto, Nahid-Al-Masood</i>	
GRADUATE ADMISSION CHANCE PREDICTION USING DEEP NEURAL NETWORK	259
<i>Md. Omaer Faruq Goni, Abdul Matin, Tonmoy Hasan, Md. Abu Ismail Siddique, Oishi Jyoti, Fahim Md Sifnatul Hasnain</i>	
MULTIPLE RECTANGULAR SLOTTED ELLIPTICAL SHAPED PATCH ANTENNA FOR MICROWAVE-BASED HEAD IMAGING	263
<i>Md Siam Talukder, Md Samsuzzaman, Md Mahedi Hasan, Md Tarikul Islam, Rezaul Azim, Norsuzlin Mohd Sahar</i>	
TMIR: TRANSIENT LENGTH EXTRACTION STRATEGY FOR ANN-INSPIRED MUSICAL INSTRUMENT RECOGNITION	267
<i>Priyanka Roy, Samarjit Roy, Debashis De</i>	
A COMPARATIVE ANALYSIS OF FEATURE EXTRACTION METHODS FOR HUMAN OPINION GROUPING USING SEVERAL MACHINE LEARNING TECHNIQUES	272
<i>Tonmoy Hasan, Abdul Matin, Mahammed Kamruzzaman, Sanzida Islam, Md. Omaer Faruq Goni</i>	
UWB-MIMO ANTENNA WITH STOP BAND BEHAVIOR AND HIGH ISOLATION	276
<i>Preeti Pannu, Devendra Kumar Sharma</i>	
TRANSMISSION CONGESTION MANAGEMENT BY RESCHEDULING OF GENERATOR USING SLIME MOULD ALGORITHM	280
<i>Subhasish Deb, Subir Datta, R. Lalbiakmuani, Kh. Premkumar Singh</i>	
PRE-PROCESSING DATA IN WEATHER MONITORING APPLICATION BY USING BIG DATA QUALITY FRAMEWORK	284
<i>Kashshaf Labeeb, Kuraish Bin Quader Chowdhury, Rabea Basri Riha, Mohammad Zoynul Abedin, Sarmila Yesmin, Mohammad Nasfikur Rahman Khan</i>	
DATASET CREATION FROM MULTILINGUAL DATA OF SOCIAL MEDIA: CHALLENGES AND CONSEQUENCES	288
<i>Mohammad Aman Ullah, Norhidayah Azman, Zulkifly Mohd Zaki, Md. Monirul Islam</i>	
LAYER-BASED ATTACKS IN THE TERNARY PLANES OF SOFTWARE-DEFINED NETWORKING	292
<i>Shanu Bhardwaj, S. N. Panda, Priyanka Datta</i>	
HYPERSPECTRAL IMAGE CLASSIFICATION USING MINIMUM NOISE FRACTION AND RANDOM FOREST	296
<i>Kanti Mahanti Sai Kishore, Manoj Kumar Behera, S. Chakravarty, Satyabrata Dash</i>	

A TWO LAYER MACHINE LEARNING SYSTEM FOR INTRUSION DETECTION BASED ON RANDOM FOREST AND SUPPORT VECTOR MACHINE	300
<i>Sabrina Afroz, S. M Ariful Islam, Samin Nawer Rafa, Maheen Islam</i>	
PREDICTION OF PROTEIN SUBCELLULAR LOCALIZATION USING MACHINE LEARNING WITH NOVEL USE OF GENERIC FEATURE SET	304
<i>Paramita Basak Upama, Nawshin Tabassum Tanny, Shahin Akhter</i>	
POTHOLE DETECTION WITH IMAGE SEGMENTATION FOR ADVANCED DRIVER ASSISTED SYSTEMS	308
<i>H. K. I. S. Lakmal, Maheshi B. Dissanayake</i>	
STATIC TIMING ANALYSIS OF SEQUENTIAL CIRCUIT WITH GUI	312
<i>Abhishek Kumar, Suman Lata Tripathi, Sandeep Dhariwal</i>	
BLU: AN INTERACTIVE LOVING PET ROBOT	316
<i>A. S. Z. Momtaz, A. U. Shaha, N. S. Chowdhury, A. K. Saha</i>	
DRUG COMPOUND PREDICTION-BASED ANALYSIS OF CIGARETTE SMOKING TO PANCREATIC CANCER PATIENTS: A BIOINFORMATICS STUDY	320
<i>Tasnimul Alam Taz, Md Kawsar, Sinthia Siddique, Kawsar Ahmed, Mohammad Ali Moni, Bikash Kumar Paul</i>	
HHO ALGORITHM FOR CLOUD SERVICE PROVIDER SELECTION	324
<i>Pratysa Mukherjee, Sudhansu S. Patra, Chittaranjan Pradhan, Rabindra K. Barik</i>	
COVID-19 MRNA VACCINE DEGRADATION PREDICTION USING REGULARIZED LSTM MODEL.....	328
<i>Sheikh Asif Imran, Md. Tariqul Islam, Celia Shahnaz, Md. Tafhimul Islam, Omar Tawhid Imam, Moinul Haque</i>	
E-WASTE INVENTORISATION FOR SUSTAINABLE SMART CITIES IN INDIA: A CLOUD-BASED FRAMEWORK	332
<i>Ankita Das, Biswajit Debnath, Nipu Modak, Abhijit Das, Debasish De</i>	
EXTERNALLY GOLD COATED PHOTONIC CRYSTAL FIBER BIOSENSOR BASED ON SURFACE PLASMON RESONANCE	336
<i>R. I. Shova, S. M. A. S. Sunny, A. S. M. Badrudduza, S. Hossain, T. Ahmed</i>	
A SEARCH FOR OPTIMAL FEATURE IN POLITICAL SENTIMENT ANALYSIS	340
<i>Mohammad Aman Ullah, Mohammed Arif Hasnayeem, Ahmed Shan-A-Alahi, Farhana Rahman, Sharmin Akhter</i>	
A ROBUST INTRUSION DETECTION SYSTEM USING ENSEMBLE MACHINE LEARNING	344
<i>Subham Divakar, Rojalina Priyadarshini, Brojo Kishore Mishra</i>	
ROAD OBJECT DETECTION IN BANGLADESH USING FASTER R-CNN: A DEEP LEARNING APPROACH	348
<i>Anik Datta, Tamara Islam Meghla, Tania Khatun, Mehedi Hasan Bhuiya, Shakilur Rahman Shuvo, Md. Mahfujur Rahman</i>	
ANALYSIS OF UWB INDOOR AND OUTDOOR CHANNEL PROPAGATION.....	352
<i>Khushbu Meena, Manoj Gupta, Arun Kumar</i>	
ADAPTIVE GABOR FILTERING USING GREY WOLF OPTIMIZATION FOR ENHANCEMENT OF BRAIN MRI.....	356
<i>Poulomi Das, Arpita Das</i>	

DETECTION OF TUBERCULOSIS FROM CHEST X-RAY IMAGES BASED ON MODIFIED INCEPTION DEEP NEURAL NETWORK MODEL	360
<i>Omar Tawhid Imam, Moinul Haque, Celia Shahnaz, Sheikh Asif Imran, Md. Tariqul Islam, Md. Tafhimul Islam</i>	
A HYBRID PAPR REDUCTION TECHNIQUE IN OFDM SYSTEMS	364
<i>V. Siva Nagaraju, Rapaka Anusha, Rajeev Ratna Vallabhuni</i>	
GAME THEORETIC BIDDING APPROACH FOR PEER-TO-PEER TRADING	368
<i>Arushi Relan, Vishu Gupta, Rajesh Kumar, M. A. Mahmud</i>	
HUMAN FALL DETECTION USING BUILT-IN SMARTPHONE ACCELEROMETER	372
<i>Chowdhury Sayef Abdullah, Masud Kawser, Md Tawhid Islam Opu, Tasnuva Faruk, Md Kafiul Islam</i>	
A PERUSAL OF ENERGY EFFICIENT AND SECURE MULTI-CH BASED CLUSTERING ROUTING PROTOCOL WITH ENHANCED QOSP FOR WIRELESS SENSOR NETWORK.....	376
<i>Ishita Banerjee, Madhumathy P</i>	
DETECTION AND CLASSIFICATION OF SKIN CANCER BY USING A PARALLEL CNN MODEL.....	380
<i>Noortaz Rezaoana, Mohammad Shahadat Hossain, Karl Andersson</i>	
SLIDING MODE CONTROLLER DESIGN FOR POWER SYSTEM STABILIZER BASED SMIB SYSTEM	387
<i>Renu Sharma, Subhranshu Sekhar Puan, Tanmoy Roy Choudhury</i>	
OPTIMIZED CROSSTALK CIRCUIT FOR LONG WIRE COPPER INTERCONNECTS USING 45NM CMOS INVERTER.....	392
<i>Himani Bhardwaj, Sunil Jadav, Harsh Sohal, Shruti Jain</i>	
DESIGN AND ANALYSIS OF A BATTERY AND SUPER CAPACITOR BASED HYBRID ENERGY STORAGE SYSTEM.....	396
<i>Naveena S, Satish Kumar Gudey</i>	
DYNAMIC ECONOMIC DISPATCH SCENARIO PLANNING FOR POWER GRIDS WITH PVS AND STORAGE.....	402
<i>Sai Surya Yarlagadda, Oktoviano Gandhi, Dhivya Sampath Kumar</i>	
A MACHINE LEARNING FRAMEWORK FOR PREDICTION INTERVAL BASED TECHNIQUE FOR SHORT-TERM SOLAR ENERGY FORECAST.....	406
<i>Dhivya Sampath Kumar, Winnie Teo, Ngiap Koh, Anurag Sharma, Wai Lok Woo</i>	
A SYMMETRIC SPARSE ARRAY DIRECTION OF ARRIVAL ESTIMATION.....	410
<i>Priyadarshini Raiguru, Dhruva Charan Panda, Rabindra Kishore Mishra</i>	
PERFORMANCE ANALYSIS OF MULTI-CHANNEL 4-QAM CWDM-VLC SYSTEM.....	414
<i>S Shivananjani, Srijith Kanakambaran</i>	
MICROCONTROLLER BASED INTELLIGENT GREENHOUSE ENVIRONMENT MONITORING AND CONTROLLING SYSTEM.....	418
<i>Nagib Mahfuz, Rounak Jahan, Md. Mominul Islam, Mehen Nigar, Shawan Karmokar</i>	
COMPARATIVE ANALYSIS BETWEEN BINARY GREY WOLF AND BINARY BAT OPTIMIZATION FOR OPTIMAL PMU PLACEMENT WITH COMPLETE OBSERVABILITY	422
<i>Subhashree Priyadarshini, Chinmoy Kumar Panigrahi</i>	

A NOVEL APPROACH OF WOMEN SAFETY ASSISTANT DEVICE WITH BIOMETRIC VERIFICATION IN REAL SCENARIO.....	426
<i>Rubaiat Khan, Nagib Mahfuz, Nadia Nowshin</i>	
A DEEP CONVOLUTIONAL NEURAL NETWORK BASED FRAMEWORK FOR BREAST CANCER DETECTION	432
<i>Debrina Dutta, Debashis Chakraborty</i>	
PERFORMANCE ANALYSIS OF LIGHT ABSORPTION IN TMDC MONOLAYERS USING COVER, SPACER, GOLD AND VO ₂ LAYERS	436
<i>Sabrina Rahman, Angkur Ghosh Priyam, Zakaria Mullah, Ayon Kumar Basak, Safayat-Al-Imam</i>	
DESIGN AND BUSINESS MODELING OF AN IOT BASED COST-EFFECTIVE VEHICULAR MONITORING SYSTEM FOR NEXT GENERATION SMART VEHICLE	440
<i>Md Shahrukh Adnan Khan, Tanzina Akter, Mirza Muhammad Yeamin Hossain, Md. Shamim Hossain, Saykot Mazumder, Md Khairul Alam</i>	
ANALYSIS OF THE TARIFF ORDER PARAMETERS OF LARGE HYDRO POWER GENERATING PLANTS	444
<i>Smita, Debari Prasad Mishra</i>	
ESTIMATION OF FREQUENCY STABILITY CONSIDERING LOAD LEVELS AND LOAD FREQUENCY RELIEF.....	448
<i>Arik Subhana, Nahid-Al-Masood</i>	
NEW THEORETICAL ASPECTS ON TWO-PORT BOUCHEROT CIRCUITS.....	452
<i>Ioana - Gabriela Sîrbu</i>	
THE IMPACT OF DELAMINATION POSITIONS ON GRADED LOW SPACER IN A THREE PHASE GAS INSULATED BUSDUCT.....	456
<i>Janaki Pakalapati, N. Karthick, G. V. Nagesh Kumar, Prasantha R. Mudimela</i>	
SIMPLISTIC SPOOFING OF GPS ENABLED SMARTPHONE.....	460
<i>Komal Kumar Songala, Supraja Reddy Ammana, Hari Chandana Ramachandrani, Dattatreya Sarma Achanta</i>	
VEHICLE DYNAMICS MODELING AND SIMULATION WITH CONTROL USING SINGLE TRACK MODEL	464
<i>Abdussalam Ali Ahmed, Johnson Santhosh, Ftema W. Aldbea</i>	
ESSENTIAL PRELIMINARY PROCESSING METHODS OF HYPER SPECTRAL IMAGES OF CROPS	468
<i>V. Lalitha, M. Nithya, S. Samundeswari, Srinidhi Srinivasan</i>	
A SPARSE BASED ADAPTIVE CHANNEL ESTIMATOR FOR WIRELESS CHANNEL.....	472
<i>Manidipa Sarkar, Swetaleena Sahoo, Sarita Nanda</i>	
A NEW T-S MODEL BASED FUZZY LOGIC APPROACH FOR MOBILE ROBOTS PATH PLANNING.....	476
<i>Prases Kumar Mohanty, Shubhasri Kundu, Shivangi Srivastava, Rudra Narayan Dash</i>	
PRE-EMPHASIS AND LINEAR PREDICTION ERROR FILTERS FOR QUALITY IMPROVEMENT OF BONE-CONDUCTED SPEECH	481
<i>Aie Su Su Kyi, Tetsuya Shimamura</i>	
PARTIAL SHADING PERFORMANCE EVALUATION OF BIFACIAL PV ARRAY CONFIGURATIONS.....	485
<i>Samantha Chinyoka, Tariro Ncube, Mercy Iroegbu, Salma M. S. Alarefi</i>	

Author Index