2017 International Conference on Communication, Control, Computing and Electronics Engineering (ICCCCEE 2017)

Khartoum, Sudan 16 – 18 January 2017



IEEE Catalog Number: ISBN:

CFP17TPC-POD 978-1-5090-1810-9

Copyright \odot 2017 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:
 CFP17TPC-POD

 ISBN (Print-On-Demand):
 978-1-5090-1810-9

 ISBN (Online):
 978-1-5090-1809-3

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



IEEE INTERNATIONAL CONFERENCE ON COMMUNICATION, CONTROL, COMPUTING, AND ELECTRONIC ENGINEERING (ICCCCEE 2017)

Contents
CALL FOR PAPER
Organizing Program Committee
TECHNICAL PROGRAM COMMITTEE
International Advisory Committee
CONFERENCE PROGRAM
Industry Plenary Sessions
Title: Telemedicine and medical informatics utilization in health care services
Title: Power System Networks, Modelling for Stability Analyses
KEYNOTE SPEECHES
Title: Power Metal - Oxide - Semiconductor Field Effect Transistor: Performance, Stability, and Reliability
Title of the speech: Efficient Modulations and Advanced Applications
Programme Layout
Reviewers
216BER Performance improvement of V2I communication by using OFDM-IM Exploiting All Subcarrier Activation Patterns
271 Wireless Power Transmission: As an Emerging Technology5
320 Reduction of Phase Noise for Inductor Based Ultra-Wide Band Voltage Controlled Oscillator
219 On-line Walking Speed Control in Human-Powered Exoskeleton Systems15
335 Frequency Diverse Array Radar the Future of Combating ECM threats22
196 Microwave Imaging System for Early Detection of Breast Cancer31
225 Systematic Literature Review: Solving Educational Timetabling Problem Using Swarm Intelligence Optimization Techniques
614 Design of Bus Tracking and Fuel Monitoring System36
596 Design of a Positioning and Tracking System for Paratroops Team41
613 Alneelain: A Formal Specification Language
600 Distance Alert System using Stereo Vision and Feature Extraction55
628 An Approach to Establishment of Cars to Road Management System60
599 Enhancement of Seamless mobility in Nested Network Mobility
625 A Design of a Remote Weather Factors Monitoring System71

IEEE INTERNATIONAL CONFERENCE ON COMMUNICATION, CONTROL, COMPUTING, AND ELECTRONIC ENGINEERING (ICCCCEE 2017)

586 Speed Control of DC Motor Using Fuzzy Logic Controller	76
584 Comparisons between AlFUR Using Intelligent Agent With LFU, LRU, Size and PCCIA Cache Replacement Technologies	
568 Radio Propagation and Troposphere Parameters Effect for Microwave Link Sudan	
548 Collaborative Filtering Techniques and Applications	94
543 Modeling and Simulation of Electric Drive Vehicle Based on Space Vector Modulation Technique and Field Oriented Control Strategy	100
541 Autonomic Management by Self-Optimization For WEINMANN	107
537 Average Least Frequency Used (ALFUR) Cache Replacement Technology USING Intelligent Agents	114
449 Design and Implementation of Communication Subsystem for ISRASAT1 Cube Satellite	119
448 Simulating Macrocell-Microcell Handovers in 4G Systems	123
457 Ant Colony Based LQR and PID tuned Parameters for Controlling Inverted Pendulum	
463 Evaluation of Boeing 747-E Lateral Autopilot Using Flying and Handling Qualities Specifications	136
468 Design of Autopilot platform using HILS approach	144
472 Design and Implementation of an Active Attitude Determination and Cont Subsystem (ADCS) for ISRASAT1 Cube Satellite	
474 Evaluation of the Quality of Encoded Quran Digital Audio Recording	
478 Student Satellites, Implementation Models & Approaches in Sudan	N/A
487 Spiking Generation in Semiconductor laser by optoelectronic feedback	158
526 Performance Analysis of Cloud Computing for Distributed Data center usin Cloud-Sim	ng 163
506 Ophthalmology Prediction System Using Machine Learning Techniques	169
466 Hardware and Software Design of Onboard Computer of ISRASAT1 Cubes	
534 Fuzzy PID Based Path Tracking Control of a 5-DOF needle-holding robot	179
497 High Altitude Testing Balloon Project	N/A
429 Detection of Malaria Parasites Using Digital Image Processing	184
431 SSReq: A method for design star schemas from requirements	189
435 DSP-Based Dispersion Compensation: Survey and Simulation	196
440 Quality Control of Magnetic Resonance Imaging (MRI)	N/A

IEEE INTERNATIONAL CONFERENCE ON COMMUNICATION, CONTROL, COMPUTING, AND ELECTRONIC ENGINEERING (ICCCCEE 2017)

402 A Modified Sphere Detection Algorithm with Lower Complexity	.203
294 Automation of a Syrup Production Line Using S7- 1200 and TIA Portal Software	.207
234 Comparative Study of the Radiation Characteristic between Uniform, Tschebyscheff and Binomial Amplitude Distributions of Linear Patch Antenna Array for X-band Radar Warning Receivers	.212
256 Exploiting the Physical Layer Security for Providing a Simple User Privacy Security System for Vehicular Networks	.220
323 K Nearest Neighbor for Text Summarization using Feature Similarity	.226
324 Using K Nearest Neighbors for Text Segmentation with Feature Similarity	.231
444 Color and Texture Fusion-based method for Content-Based Image Retrieval	.236
521 Anomaly Detection Approach using Hybrid Algorithm of Data Mining Technique	.242
489 Grid Connected Photovoltaic System	
533 Back Stepping Tracking controller for Wheeled Mobile Robot	
567 Development Arabic Search Engine	
569 Fuel Management System	
601 Developing Tool For Odoo	
375 Forum discussion summarization Based on Cross	
380 Functionality Assessment for NDT and WSDMDA Methodologies Using Quality Evaluation Framework	.N/A
403 Clutter Estimation Based on Compressed Sensing in Bistatic MIMO Radar	.278
409 Modeling and Simulation of Air Data Computer	.284
438 Fault diagnosis using Cross-Wavelet Transform for Electricity Pre-Payment Meter	.291
800 Agent Based Load Management for Microgrid	.296
416 Tel-radiology Implementation: an Image Analysis Case	.N/A
412 Demodulator Based on Deep Belief Networks in Communication System	.302
398 Sum Rate Analysis Of Massive Multiple Input Multiple Output System For Linear Precoding Using Normalization Methods	.307
357 Joint MFCC-and-Vector Quantization based Text-Independent Speaker Recognition System	.314
88 Early Cost Estimation of Software Reworks Using Fuzzy Requirement-Based Model	.320

IEEE INTERNATIONAL CONFERENCE ON COMMUNICATION, CONTROL, COMPUTING, AND ELECTRONIC ENGINEERING (ICCCCEE 2017)

360 Using the TCP Retransmission Timeout for Solving the KCI attack Problem against the TLS ProtocolNo	/A
265 Proposed security model for web based application and service32	25
399 An Algebraic Explanation for Maximum Decision33	31
243 Indoor Navigation Algorithm for Mobile Robot using Wireless Sensor Networks	35
286 Custom In-System Firmware Upgrade for MSP430 Microcontrollers Family Using SPI34	10
233 Designs and Simulation of Wide Band Input Matching Circuit for RF Power Transistor in VHF Range34	15
275 Performance Analysis of three (SCP) Classical Encryption Algorithms in Encrypting Database Transactions	/A
280 Automated and Monitored Liquid Filling System Using PLC Technology35	50
384 Practical Considerations for Interfacing Operational Amplifiers with Analog to Digital Converters in Microcontrollers35	
296 Design, Implementation and Performance Analysis of Crystal Video Front End for X-band Radar Warning Receiver35	
21 Improving the Voltage Profile of the Transmission Lines by Using the Series Compensation Under Different Loading Conditions	55
439 Economic Measures of Power Plants	72
260 Maximizing Solar Energy Input For Cubesat Using Sun Tracking System And A Maximum Power Point Tracking37	77
239 Implementation of A PID Control System On Microcontroller (DC Motor Case Study)	
279 Real Time Embedded Cam Shift Object Tracking Algorithm using Davenci TMS320DM6437 EVM38	38
285 Automatic Detection and Classification of Malarial in Thin Blood Slide Images	
330 Correlated Transfer of Discrete Charge in Long Arrays of Tunnel Junctions39) 9
376 Reliability Assessments and Feasibility Study for an Industrial Facility with the Integration of Hybrid Renewable Energy System40)3
410 Power Flow Control and Tie Line Stiffness between Sudan and Ethiopia40)9
405 Design of Fuzzy-Based Autonomous Car Control System41	13

Additional Papers

353 Enhanced Bandwidth Reservation Guarantees for QoS Routing in Vehicular Network	420
377 Multiple Physical Layer Pipes Performance for DVB-T2	426
636 Web-based GIS Business Hotels Tourism Sites In Khartoum, Sudan	432
618 Buildings Cooling: An experimental study of Phase Change Materials storage for low energy buildings	437