

3rd International Conference on Digital Information Processing and Communications

(ICDIPC 2013)

**Dubai, United Arab Emirates
30 January - 1 February 2013**

ISBN: 978-1-5108-0856-0

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2013) by Society of Digital Information and Wireless Communication (SDIWC)
All rights reserved.

Printed by Curran Associates, Inc. (2015)

For permission requests, please contact Society of Digital Information and Wireless Communication (SDIWC) at the address below.

Society of Digital Information and Wireless Communication (SDIWC)
Unit 1010, 10/F, Miramar Tower
132 Nathan Road, Tsim Sha Tsui
Kowloon, Hong Kong

Phone: +(202)-657-4603

sdiwc@sdiwc.net

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

Table of Contents

A Novel Encryption Standard (DES) with Time Hopping Sequence For RFID System.....	1
Attested Genuineness in Service Oriented Environments.....	8
How to Violate Android's Permission System Without Violating It.....	18
BOSF: By-Owner Script Filtering.....	26
Arbitrated Multiparty Protocol.....	31
A Novel Method for Secure Image Delivery over Mobile Networks Based on Orthogonal Transforms and Scrambling Algorithms.....	37
Image Recognition Method based on Discrete Wavelet Transform (DWT) and Singular Value Decomposition (SVD)	42
Performance Analysis Under Imperfect Channel State Information and Inter-Cell Interference in LTE-Advanced System.....	48
A Novel Data Compression and Suppression Methods based on DCT and Overlapping for the Wireless Sensor Networks (WSN).....	52
Secure Authentication Mechanism in Mobile Internet Protocol Version 6.....	56
A Structured Aggregate Signature Scheme with Pairing-based Cryptography.....	64
Securing a Cloud-based Community Trust Store for Local P2P E-Commerce.....	74
An Approach Based on Semantic Management of User Profile to Ubiquitous Applications Adaptation.....	87
A Basic Security Requirements Taxonomy to Quantify Security Threats: An E-learning Application.....	96
Digital Signature Scheme Enabling Pre-Control of Content Editing for Secondary Use.....	106
Steganographic Scheme Using The Z_4 -Linear Goethals Codes.....	114
A New Watermarking Attack Using Blind Sources Separation.....	122
Regulators of Timeliness Data Quality Dimension for Changing Data Quality in Information Manufacturing System (IMS).....	126
Inter-Layer Sharing of Backup Path Capacities Providing Fast Service Recovery In IP-MPLS/WDM Networks....	134
Defence in-depth for Cyber Security With Custom Anti-Virus Signature Definition.....	149
Change Detection for Sustainability Monitoring Using Satellite Remote Sensing Data.....	157
Reliability Evaluation of Multi-source Multi-sink Stochastic-Flow Networks under Quickest Path and System Capacity Constraints.....	166
Websites and Webpages Credibility and Trust Evaluation.....	174
Spatial Subspace Clustering for Hyperspectral Data Segmentation.....	180
Verification of Statistical Properties for Hyperspectral Images: Heteroscedasticity and Non-stationarity.....	191
SOFL Three-Step Approach to Construct The Formal Specification of A Brain Tumor Treatment System.....	196
Applying Intelligent Agents In Wireless Sensor Networks As Base Stations.....	203
Effect of Space in An Adhoc Network.....	209
Pooled Methodology for Combating Primary User Emulation Attack in Cognitive Radio Networks.....	221
When Churn Happens in A Middle East Telecom Operator.....	230
Bandwidth Optimization Through Real Time Audio/Video Codec Switching By Using IMS.....	241
New Crossing Minimization Technique for Cancer Datasets Biclustering.....	248
A Meta Description Logics Knowledge Base for Arabic Language Processing.....	254
Predicting Future Ranking of Online Novels based on Collective Intelligence.....	261
Monitoring Systems In Intensive Care Units Using Incremental Support Vector Machines.....	273
Java Applications Comprehension by Discovering Clusters of Related Classes.....	281
Fractal Based Data Separation in Data Mining.....	287

Database Optimization for Large-Scale Web Access Log Management.....	296
A Novel Semantic Search Technique Using Ontology.....	303
Real Life Pilot Solution with Artificial Intelligence for Disabled Computer Users.....	308
Comparative Studies of Artificial Intelligence (AI) Techniques.....	313
Prediction of Istanbul Stock Exchange (ISE) Direction Based on News Articles	320
Inertial System for Measurement of the Dynamic Response and Status of the Vehicle Suspension Elements.	331
NFC Application Interface for Smart Phones and Appliances.....	337
Efficient Temperature Aware Design for Portable Processors.....	341
Ultra-Low Complexity Control for AdHoc Mobile Sensor Networks.....	346
Design Noisy Digital Communication Channel Emulator Based-On Weibull Distribution.....	358
Tunable Current-Mode Tow-Thomas Biquad Based on CDTAs.....	366
LTE Handset RF Power Consumption Emulation.....	371
Performance Evaluation of MC-CDMA System Using Delta Modulation in Ultra Wide Band Channel.....	379
A Hybrid Method with Confusion Network for Indexing Spoken Documents in E-libraries.....	386
Legistical Efforts By E-Government.	391
ONTOCARER: An Ontological Framework for Assistive Agents for The Disabled.....	404
Guarding Simple Polygons with Semi-open Edge Guards.....	417
Medical Image Segmentation Using Hidden Markov Random Field A Distributed Approach.....	423
Objects Extraction for License Plate Detection.....	431
Scheduling Techniques for Parallel Implementation of Wear Particle Recognition Algorithms.....	439
Classification of Piper Nigrum Samples Using Machine Learning Techniques: A Comparison.....	454
Robust 2D Augmented Reality Based on Homography Refinement and Temporal Coherence.....	463
Glare Region Detection in Night Scene Using Multi-Layering.....	467
Error Modeling of Depth Measurement Using Fir Stereo Camera Systems.....	470
Enhancement and Performance Analysis on Dutta and Chaudhuri Color Edge Detection Algorithm In RGB Color Space.....	476
A Study on Providing Natural Two-handed Interaction Using a Hybrid Camera.....	481
Fast Stereo Image Rectification Using Mobile GPU.....	485
Fast Generation of Digital Video Holograms Using a Spatio-Temporal Sampling Scheme and GPUs.....	489
Convergence of Cloud Computing, Service Oriented Architecture and Enterprise Architecture.....	493
A Swot Analysis on CISCO® High Availability Virtualization Clusters Disaster Recovery Plan.....	501
A New Architecture of an Autonomous System in Cloud Computing.....	507
Healthcare Applications on Mobile Cloud Computing.....	514
Analysis of SaaS Multi-Tenant Database in A Cloud Environment.....	523
Cloud Computing Services in Mobile Devices Using Android Face Detector API and Rest Communication.....	529
Density Propagation Based Particle Filter Algorithm for Video Object Tracking.....	538
A Roll of GUI (Graphical User Interface) observed in Hollywood Blockbuster Film.....	547
Focused Search Using Community Search Logs.....	557
Analysis Of Online Materials and Their Impact.....	564
ICT As An Effective Tool For Learning English.....	569
Identifying Students' Trends Toward Personalizing Learning Management System (LMS) at Zarqa University.....	574
Social Network Media: Analyzing Student Interaction in Blended E-learning System and its Impact to Learning of Non-native English Students.....	581

Development of Sustainable Key Performance Indicator (KPI) Monitoring and Control System Using Viable System Model.....	593
Semi-Fluid: Implementing A High Speed Content Distribution Model for Peer-TO-Peer Overlay Network.....	600
Optimising Insurance Fraud Detection and Classification of Vehicle Accident Damange by Using Neural Networks to Identify Patterns in Behaviour, Liked Cases and Vehicle Recognition.....	611
Location-based Mobile Advertising: A step Towards Mobile Commerce in Developing World.....	621
MyHealthyKids: Intelligent Obesity Intervention System for Primary School Children.....	627
Performance Analysis of Java APIs for XML Processing.....	634
Design and Implementation of Cache Manager for Hybrid Storage.....	644
The Use of the Aspect Oriented Programming (AOP) Paradigm in Discrete Event Simulation Domain: Overview and Perspectives.....	653
A New Test Process for SOA by Deploying ISTQB Framework	661
A New Virtualization-Based Security Architecture in A Cloud Computing Environment	676
Performance Analysis Under Imperfect Channel State Information and Optimizing and Improvement Performance of Dual Band CPW-fed Monopole Antenna	687
Simulation and Analysis of Path Loss Models for WiMax Communication System	692
Current Threats of Wireless Networks.....	704
A Modified Method of Information Hiding Based on Hybrid Cryptography and Steganography	714
Service Level Agreement Checking in Cloud Computing in Terms of Verification and Validation Concepts.....	727