2012 Second International Conference on Digital Information Processing and Communications

(ICDIPC 2012)

Klaipeda City, Lithuania
10 – 12 July 2012

IEEE

IEEE Catalog Number: CFP1243S-PRT
ISBN: 978-1-4673-1106-9

TABLE OF CONTENTS

Research Of IEEE 802.11 Standard Signal Propagation Features In Multi Partition Indoors 1
S. Japertas, E. Orzekauskas, R. Slanys

Using Wireless Networking For Vehicular Environment: IEEE 802.11a Standard Performance 5
J. Jansons, A. Barancevs

Water Monitoring System Using Wireless Sensor Network (WSN): Case Study Of Kuwait Beaches 10
A. Alkandari, M. Alnasheet, Y. Alabduljader, S. Moein

Analysis Of Wireless Ad-Hoc Network Parameters For Efficient Multipath Video Transmission 16
L. Cikovskis, I. Slaidins

Goodput Analysis In Short Range Vehicle Network Depends On Auto Traffic Parameters 22
J. Jansons

Analyzing IEEE 802.11n Standard: Outdoor Performanace 26
J. Jansons, T. Dorins

Dual Decomposition Scheme For Resource Allocation Problem In Networks With Moving Nodes 31
I. Konnov, O. Kashina, E. Laitinen

Energy Loss Model In A Wireless Sensor Network 36
V. Bulbenkiene, T. Lenkauskas, S. Jakovlev, G. Pridotkas, G. Mumgaudis

Modeling Prioritized Time-Slot Channel Allocation Scheme In Mobile Wireless Networks 39
B. Mwecumi, T. Bulega, O. Michael

A Complex Network Approach For A Regional Power Grid Analysis 45
G. Fenu, M. Nitti, P. Pau

Power Trace Alignment For Cryptosystems Featuring Random Frequency Countermeasures 51
Q. Tian, A. Shoufan, M. Stoettinger, S. Huss

RFID Communication: How Well Protected Against Reverse Engineering? 56
A. Mednis, R. Zviedris

Proactive Mobile Agent Security: A New Access Control Approach Based On The Risk Analysis 62
H. Dhoub, A. Loukil, A. Ammari, A. Jemai

SD-AEI: An Advanced Encryption Technique For Images 68
S. Dey

Power Amount Analysis: Another Way To Understand Power Traces In Side Channel Attacks 74
Q. Tian, S. Huss

Domain Specific Language For Securities Settlement Systems 80
O. Krasts, A. Kleins, A. Teilans

Self-Organizing Transmission Scheduling Mechanisms Using A Pulse-Coupled Oscillator Model For Wireless Sensor Networks 84
Y. Taniguchi, G. Hasegawa, H. Nakano

Security-Effective Fast Authentication Scheme For PMIPv6-Based NEMO With Global Mobility Suppor 90
I. Im, J. Jeong

Workflow Based Approach For Designing And Executing Mobile Agents 96
A. Mislevics, J. Grundspenkis

Virtual Screen For Cloud Thin Clients 102
S. Kanetkar, H. Shahnasser

Representation Of Study Program As A Part Of Graph Based Framework For Tutoring Module Of Intelligent Tutoring System 108
R. Rollande, J. Grundspenkis

e-Learning, Web 2.0 And Beyond 114
M. Banday

Dog Voice Identification (ID) For Detection System 120
C. Yeo, S. Al-Haddad, C. Ng

Energy Saving In Industrial Processes Using Modern Data Acquisition Systems 124
J. Januteniene, T. Lenkauskas, R. Didziokas, S. Jakovlev, R. Obsta

A No-Reference Blur Image Quality Measure Based On Wavelet Transform 127
F. Kerouh, A. Serir

A Novel Way Of Identifying Suspect Picture Files 133
R. Shaw, A. Atkins

Image-Based Dice Interpretation For A Yahtzee Game 138
O. Tiebe, P. Spitzer, M. Grzegorzek

Chessboard Recognition System Using Signature, Principal Component Analysis And Color Information 141
I. Khater, A. Ghorab, I. Aljarrah
Experiments On The LFW Database Using Curvelet Transforms And A Random Forest-kNN Cascade 146
S. Kayal
Effect Of Guard Ring On Sensitivity Of The Photo-Transistor Used In An Optical Mouse 150
S. Park, H. Uh, K. Kim
An Accelerated Coordination Of Stochastic Multi-Agents By Moving Speed 154
I. Shioya, T. Miura
A Novel Model Of Console Remote Interaction Based On I/O Buffer Access 160
L. Tang, Y. Song, Z. Lan
An Efficient Key Agreement With Rekeying For Secured Body Sensor Networks 164
Z. Mehmood, Nizamuddin, S. Ashraf, W. Nasar, A. Ghani
Fixed Priority SWAP Scheduling Policy With Differentiated Services Under Varying Job Size Distributions 168
M. Okopa, H. Okii
Composing Activity Aspect Diagrams Using Graph Transformation Approach 174
F. Khennouf, A. Hettab, A. Chaoui, M. Babahenni
The Deployment Of MIS In Developing Countries 180
S. Alwahaishi, V. Snasel
A Cloud Based Web Analysis And Reporting Of Vital Signs 185
Y. Alqudah, E. AlQaralleh
Author Index