

China-Ireland International Conference on Information and Communications Technologies 2010

(CIICT 2010)

**Wuhan, China
10-11 October 2010**

ISBN: 978-1-61782-816-4

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© (2010) by the Scientific Research Publishing Inc.
All rights reserved.

Printed by Curran Associates, Inc. (2011)

For permission requests, please contact the Scientific Research Publishing Inc.
at the address below.

Scientific Research Publishing Inc.
P.O. Box 54821
Irvine, CA 92619-4821

Phone: (408) 329-4591

bookorder@scirp.org

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

Contents

Offset Analyses of MEMS Wine-glass Resonator in Inertial Environment <i>Lin-xi DONG, Bao-qing LIU, Xiao-di WANG, Yan WU, Ling-ling SUN</i>	(1)
Improving 802.11 Wireless Network's Performance for Real-time Multiplayer Games <i>Hanhang Qi, David Malone</i>	(5)
GA based Opportunistic Spectrum allocation algorithm in Cognitive Radio Ad hoc Networks <i>Rongchao Fan, Huyin Zhang, Mengyi Liu, Li Li, Qi Wang, Jun Liu, Hanqing Zhao</i>	(10)
Load Balance and Cache Strategy for P2P VOD System <i>Yong Jiang, Heping Li, Shuwu Zhang</i>	(15)
Design and Selection of Matching Stub for Satellite Reflector Antenna Waveguide Feeds <i>R. Todd, D. Linton, G. Stafford, T. Huang</i>	(19)
An Analytic Model of a Buffered Multi-Port Optical Burst Switch using Two-Moments Traffic Approximations <i>Daniele Tafani, Conor McArdle, Liam P. Barry</i>	(23)
An Efficient Log System for large file Distribution Behavior Analysis in Peer-to-Peer Networks <i>Xiaofei Wang, Chengchen Hu, Yachao Zhou, Xiaojun Wang, Bin Liu</i>	(28)
Efficient Pattern Matching with Counting Bloom Filter <i>Yachao Zhou, Xiaojun Wang</i>	(33)
Prediction of Measured iBurst TM Signal by Linear and Logarithmic Regression on Distance from Base Station <i>Serenus Jeyakumar, David Linton, Colin Shields</i>	(37)
A Routing Algorithm for Large-scale Sensing Using Wireless Sensor Networks <i>Mei Wu, Martin Collier</i>	(41)
Adjacency Persistency in OSPF MANET <i>Juan Antonio Cordero</i>	(46)
Multi-user Detection Based on Intelligent Optimization Algorithm <i>YUE Ke-qiang, SUN Ling-ling</i>	(54)
Automated Vision-based Tracking of Cell Movement and Deformation in Image Sequences <i>Sha Yu, Derek Molloy</i>	(58)
3D Reconstruction and Texturing using Affine SIFT on Uncalibrated Sparse Image Sets <i>Jiao Tian, Derek Molloy</i>	(63)
A real-time software-based volume rendering technique for virtual endoscopy <i>Qiusha Min, Robert J.T. Sadleir</i>	(68)
Unbiased Direct GM(1,1) Model for Grey Prediction Control <i>Peirong Ji, Qinghua Zhang, Wenzhang Xu</i>	(72)
Summarisation & Visualisation of Large Volumes of Time-Series Sensor Data <i>Zhengwei Qiu, Cathal Gurrin, Aiden R. Doherty, Alan F. Smeaton</i>	(77)
Investigating the Effect of Stochastic Replacement Rates on GeneRepair Templates <i>Donagh Hatton, Diarmuid P. O'Donoghue, Amy Fitzgerald</i>	(81)
Design of the GTC Layer in GPON ONU <i>Dejin He, Keming Chen, Lixiao Yu, Qi Ma</i>	(86)
A 2.4GHz 21dBm Class AB Power Amplifier in a 0.35-μm Standard CMOS Process <i>Jincai Wen, Lingling Sun</i>	(90)

User Modeling in Music Interest Based on Wavelet Support Vector Machine	
<i>Ruoyu Fang, Weiling Xu, Qiong Zhang, Hong Zhang, Xing Lin, Haoxun Li</i>	(93)
ISIS – Study of Vehicle Penetration Loss and RF Signal Depreciation in Buses for Enhanced Vehicular Communication Systems	
<i>Serenus Jeyakumar, Kieran McLaughlin, David Linton</i>	(99)
Analyzing the substrate effect of Deep n-Well Structure in 0.18 μ m CMOS Technology	
<i>Xia Fang, Lingling Sun, Jun Liu</i>	(103)
Analysis of Individual Energy Consuming Components in a Wireless Handheld Device	
<i>Dennis Theurer, Martin Kennedy, Hrishikesh Venkataraman, Gabriel-Miro Muntean</i>	(108)
Layered Service-Based Mapping Mechanism for Video Streaming over Wireless Networks	
<i>Yunsheng Zhang, Yongfei Zhang, Shixin Sun</i>	(113)
ANN-Based Multi-Hop Packet Delay Bound Violation Modeling for Video Streaming over Mesh Networks	
<i>Yunsheng Zhang, Yongfei Zhang, Shixin Sun, Zhihai He</i>	(118)
Example-Based Grammar Abstraction and Machine Translation via Spread of Activation	
<i>Toshiyuki Uchino</i>	(123)
A novel model of AlGaN/GaN HEMT based on Artificial Neural Network	
<i>Zhi-Qun Chang, Sha Hu, Jun Liu, Qi-Jun Zhang</i>	(129)
Tunable Lasers in Self-Coherent Optical Networks	
<i>K. Shi, P. M. Anandarajah, R. Maher, L. P. Barry, Yonglin Yu</i>	(132)
All-Optical Clock Recovery Based on a Quantum-Dash Fabry-Pérot Semiconductor Laser in a 3R Regenerator with Modulation Format Conversion at 40 Gb/s	
<i>Josué Parra-Cetina, Sylwester Latkowski, Ramón Maldonado-Basílio, Pascal Landais</i>	(136)
Direct Detection Optical OFDM over Single Mode Fibre Simulation	
<i>C. Browning, D.A. Reid, B. Cardiff, F. Smyth, L.P. Barry</i>	(140)
The Security of Lee and Chang's <i>t</i> -out-of- <i>n</i> lottery protocol	
<i>David Gray</i>	(145)
Algorithmic Multi-match Packet Classification in Network Intrusion Detection Systems	
<i>Brendan Cronin, Xiaojun Wang</i>	(150)
A New Synchronization Mechanism Based on CC1100	
<i>SHENTU Xudan, LI Wenjun, SUN Lingling, LI Pengyu, GONG Siliang</i>	(157)
High Resolution Technology in Digital Imaging and its Remote Sensing Applications	
<i>Lei Yan, Adam Winstanley, Yunfei Lu, Hao Feng, Yini Duan</i>	(161)
A Dual Tree Complex Wavelet Image De-noising Method Based on Scale Noise Level Estimation	
<i>Weiling XU, Shuwang WANG, Jingwen YAN</i>	(166)
Implementing the Verified Software Initiative Benchmarks using Perfect Developer	
<i>Yan Xu, Rosemary Monahan</i>	(171)
A New Online Billing System for Information Security Service	
<i>Chen Liquan, Heping Li, Shuwu Zhang</i>	(177)
Challenges and Solutions for handheld Video Retrieval Devices	
<i>David Scott, Cathal Gurrin, Colum Foley</i>	(181)
High-Efficient Dynamic Equal-Scaled Algorithm for 4G LTE Cloud Computing Web Applications	
<i>Simon C. Li, Che-Hao Hsu</i>	(185)