### Contents

Privacy-Preserving Public Auditing Together with Efficient User Revocation in the Mobile Environments ................................. 1  
*Feng Chen, Hong Zhou, Yuchuan Luo, and Yingwen Chen*

Multi-proxy Multi-signature Binding Positioning Protocol .............. 9  
*Huafeng Chen, Qingshui Xue, Fengying Li, Huajun Zhang, Zhenfu Cao, and Jianwen Hou*

Efficient Network Structure of 5G Mobile Communications ............ 19  
*Kwang-Cheng Chen, Whai-En Chen, Wu-Chun Chung, Yeh-Ching Chung, Qimei Cui, Cheng-Hsin Hsu, Shao-Yu Lien, Zhisheng Niu, Zhigang Tian, Jing Wang, and Liqiang Zhao*

Optimal Channel Assignment Schemes in Underlay CRNs with Multi-PU and Multi-SU Transmission Pairs ................................. 29  
*Long Chen, Liusheng Huang, Hongli Xu, Hou Deng, and Zehao Sun*

A Group Bandwidth Reservation Scheme for the Control Channel in IEEE 802.11p/1609 Networks .................................................. 40  
*Yen-Hung Chen, Ching-Neng Lai, Yuan-Cheng Lai, and Yang-Chi Li*

k-Perimeter Coverage Evaluation and Deployment in Wireless Sensor Networks ................................................................. 50  
*Ying Chen, Changying Li, Jiguo Yu, Hongsong Zhu, and Yuyan Sun*

Modeling Flu Trends with Real-Time Geo-tagged Twitter Data Streams .... 60  
*Jaime Chon, Ross Raymond, Haiyan Wang, and Feng Wang*

Radio Signal Based Device-Free Velocity Recognition .................... 70  
*Mingwei Dai and Xiaoxia Huang*

Minimum-Cost Information Dissemination in Social Networks ........... 83  
*Dongping Deng, Hongwei Du, Xiaohua Jia, and Qiang Ye*

Finding Overlapping Communities with Random Walks on Line Graph and Attraction Intensity ....................................................... 94  
*Xiaoheng Deng, Genghao Li, and Mianxiong Dong*

Computing an Optimal Path with the Minimum Number of Distinct Sensors . 104  
*Chenglin Fan, Qing Yang, and Binhai Zhu*
ULRAS: Ultra-Lightweight RFID Authentication Scheme for Mobile Device

Kai Fan, Nan Ge, Yuanyuan Gong, Hui Li, Ruidan Su, and Yintang Yang

Soft Reservation Based Prioritized Access: Towards Performance Enhancement for VoIP over WLANs.

Bing Feng, Zhen Wang, Chi Zhang, Nenghai Yu, and Yuguang Fang

Impact of a Deterministic Delay in the DCA Protocol

Li Feng, Jiguo Yu, Xiuzhen Cheng, and Shengling Wang

EBRS: Event Based Reputation System for Defensing Multi-source Sybil Attacks in VANET

Xia Feng, Chun-yan Li, De-xin Chen, and Jin Tang

iSound: A Smartphone Based Intelligent Sound Fusion System for the Hearing Impaired

Kathryn Grebel, Duy Dang, Liran Ma, Donnell Payne, and Brent Cooper

Estimation Based Adaptive ACB Scheme for M2M Communications

Hongliang He, Pinyi Ren, Qinghe Du, and Li Sun

Optimal Power Allocations for Two-Users Spectrum Sharing Cognitive Radio with Interference Limit

Yanfei He, Yuan Wu, Jiachao Chen, Qinglin Zhao, and Weidang Lu

Adaptive Resource Allocation for Anti-money Laundering Based on SMDP

Xintao Hong, Hongbin Liang, and Zengan Gao

Infrastructure Deployment and Optimization for Cloud-Radio Access Networks

Xiang Hou, Bin Lin, Rongxi He, Xudong Wang, and Tao Yu

A Cluster Head Rotation Cooperative MIMO Scheme for Wireless Sensor Networks

Huaida Hua, Jian Qiu, Shiwei Song, Xizhe Wang, and Guojun Dai

A Distributed Game-Theoretic Power Control Mechanism for Device-to-Device Communications Underlaying Cellular Network

Jun Huang, Yi Sun, Cong-Cong Xing, Yanxiao Zhao, and Qianbin Chen

A Low Overhead and Stable Clustering Scheme for Crossroads in VANETs

Yan Huo, Yuejia Liu, Xiaoshuang Xing, Xiuzhen Cheng, Liran Ma, and Tao Jing
Online Channel Assignment, Transmission Scheduling, and Transmission Mode Selection in Multi-channel Full-Duplex Wireless LANs

Zhefeng Jiang and Shiwen Mao

Optimal Preference Detection Based on Golden Section and Genetic Algorithm for Affinity Propagation Clustering

Libin Jiao, Guangzhi Zhang, Shenling Wang, Rashid Mehmood, and Rongfang Bie

DRL: A New Mobility Model in Mobile Social Networks

Tao Jing, Yating Zhang, Zhen Li, Qinghe Gao, Yan Huo, and Wei Zhou

SGSA: Secure Group Setup and Anonymous Authentication in Platoon-Based Vehicular Cyber-Physical Systems

Chengzhe Lai, Rongxing Lu, and Dong Zheng

A Bidder-Oriented Privacy-Preserving VCG Auction Scheme

Maya Larson, Ruinian Li, Chunqiang Hu, Wei Li, Xiuzhen Cheng, and Rongfang Bie

A Secure Multi-unit Sealed First-Price Auction Mechanism

Maya Larson, Wei Li, Chunqiang Hu, Ruinian Li, Xiuzhen Cheng, and Rongfang Bie

Flow-Level Performance of Device-to-Device Overlaid OFDM Cellular Networks

Lei Lei, Huijian Wang, Xuemin (Sherman) Shen, Zhangdui Zhong, and Kan Zheng

Bernoulli Sampling Based (epsilon, delta)-Approximate Frequency Query in Mobile Ad Hoc Networks

Ji Li, Siyao Cheng, Zhipeng Cai, Qilong Han, and Hong Gao

Secure and Verifiable Multi-owner Ranked-Keyword Search in Cloud Computing

Jinguo Li, Yaping Lin, Mi Wen, Chunhua Gu, and Bo Yin

A Dynamic Differentiated QoS Based Call Admission Control Service Model for Core Node in Wireless Sensor Network Topology Control

Luqun Li

Secure and Privacy-Preserving Location Proof in Database-Driven Cognitive Radio Networks

Yi Li, Lu Zhou, Haojin Zhu, and Limin Sun

SDP: Separate Design Principle for Multichannel Scheduling in Priority-Aware Packet Collection

Feilong Lin, Cailian Chen, Cunqing Hua, and Xinping Guan
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative Spectrum and Infrastructure Leasing on TV Bands</td>
<td>623</td>
</tr>
<tr>
<td>Xiaoshuang Xing, Hang Liu, Xiuzhen Cheng, Wei Zhou, and Dechang Chen</td>
<td></td>
</tr>
<tr>
<td>Information Security Enhancement with Actual Access Statuses of Users in the Multi-user System</td>
<td>634</td>
</tr>
<tr>
<td>Datong Xu, Pinyi Ren, Qinghe Du, and Li Sun</td>
<td></td>
</tr>
<tr>
<td>Joint Secure Beamforming and User Selection for Multi-user MISO Systems with Confidential Messages</td>
<td>644</td>
</tr>
<tr>
<td>Dongyang Xu, Pinyi Ren, Qinghe Du, and Li Sun</td>
<td></td>
</tr>
<tr>
<td>Network Reachability Analysis on Temporally Varying Interaction Networks</td>
<td>654</td>
</tr>
<tr>
<td>Zhonghu Xu and Kai Xing</td>
<td></td>
</tr>
<tr>
<td>Performance of Target Tracking in Radar Network System Under Deception Attack</td>
<td>664</td>
</tr>
<tr>
<td>Chaoqun Yang, Heng Zhang, Fengzhong Qu, and Zhiguo Shi</td>
<td></td>
</tr>
<tr>
<td>Resource Allocation in Cooperative Cognitive Maritime Wireless Mesh/Ad Hoc Networks: An Game Theory View</td>
<td>674</td>
</tr>
<tr>
<td>Tingting Yang, Chengming Yang, Zhonghua Sun, Hailong Feng, Jiadong Yang, Fan Sun, and Ruilong Deng</td>
<td></td>
</tr>
<tr>
<td>Shanhe Yi, Zhengrui Qin, and Qun Li</td>
<td></td>
</tr>
<tr>
<td>Mobile Data Gathering with Time-Constraints in Wireless Sensor Networks</td>
<td>696</td>
</tr>
<tr>
<td>Xuming Yin, Jinghua Zhu, Yingshu Li, and Zhiqiang Wu</td>
<td></td>
</tr>
<tr>
<td>A Poisson Distribution Based Topology Control Algorithm for Wireless Sensor Networks Under SINR Model</td>
<td>706</td>
</tr>
<tr>
<td>Kan Yu, Zhi Li, Qiang Li, and Jiguo Yu</td>
<td></td>
</tr>
<tr>
<td>PPSSER: Privacy-Preserving Based Scheduling Scheme for Emergency Response in Medical Social Networks</td>
<td>715</td>
</tr>
<tr>
<td>Wenbin Yu, Cailian Chen, Bo Yang, and Xinping Guan</td>
<td></td>
</tr>
<tr>
<td>Secrecy-Oriented Adaptive Clustering Scheme in Device-to-Device Communications</td>
<td>725</td>
</tr>
<tr>
<td>Luke Zhang, Li Wang, and Xiaojiang Du</td>
<td></td>
</tr>
<tr>
<td>Cooperative Beamforming and Artificial Noise Design for Secure Multi-pair Communications in Wireless Two-Way Relay Networks</td>
<td>735</td>
</tr>
<tr>
<td>Yizhen Zhang, Guobing Li, Guomei Zhang, and Gangming Lyu</td>
<td></td>
</tr>
</tbody>
</table>
On the Stable Throughput in Wireless LANs .......................... 745
  Qinglin Zhao, Taka Sakurai, Jiguo Yu, and Limin Sun

Antenna Selection in Large-Scale Multiple Antenna Systems ............ 756
  Zhongyuan Zhao, Mugen Peng, Li Wang, Wenqi Cai, Yong Li,
  and Hsiao-Hwa Chen

Energy-Balanced Backpressure Routing for Stochastic Energy
Harvesting WSNs .......................................................... 767
  Zheng Liu, Xinyu Yang, Peng Zhao, and Wei Yu

Motion Recognition by Using a Stacked Autoencoder-Based Deep
Learning Algorithm with Smart Phones ............................... 778
  Xi Zhou, Junqi Guo, and Shenling Wang

SDN-Based Routing for Efficient Message Propagation in VANET ......... 788
  Ming Zhu, Jiannong Cao, Deming Pang, Zongjian He, and Ming Xu

Critical Point Aware Data Acquisition Algorithm in Sensor Networks .... 798
  Tongxin Zhu, Xinrui Wang, Siyao Cheng, Zhipeng Cai, and Jianzhong Li

Constructing Virtual Backbone with Bounded Diameters in Cognitive
Radio Networks .......................................................... 809
  Wenchao Li, Jiguo Yu, Dongxiao Yu, and Baogui Huang

A Simplified Attack-Defense Game Model for NSSA ..................... 820
  Xueyan Sun, Xiaowu Liu, and Shuwen Zhang

Hadoop-Based Analysis for Large-Scale Click-Through Patterns
in 4G Network .......................................................... 829
  Shuqiang Wang, Yanyan Shen, Jinxing Hu, Zhe Xuan, and Zhe Lu

Detecting Targets Based on a Realistic Detection and Decision Model
in Wireless Sensor Networks ........................................... 836
  Tian Wang, Zhen Peng, Junbin Liang, Yiqiao Cai, Yonghong Chen,
  Hui Tian, and Bineng Zhong

Ant Colony-Based Energy Control Routing Protocol for Mobile
Ad Hoc Networks ....................................................... 845
  Jipeng Zhou, Xuefeng Wang, Haisheng Tan, and Yuhui Deng

Author Index ............................................................. 855
Wireless Algorithms, Systems, and Applications
10th International Conference, WASA 2015, Qufu, China, August 10-12, 2015, Proceedings
Xu, K.; Zhu, H. (Eds.)
2015, XVII, 858 p. 345 illus., Softcover
ISBN: 978-3-319-21836-6