Randomized Skip Graph-Based Authentication for Large-Scale RFID Systems ........................................ 1
  Yudai Komori, Kazuya Sakai, and Satoshi Fukumoto

Tefnut: An Accurate Smartphone Based Rain Detection System in Vehicles ........................................ 13
  Hansong Guo, He Huang, Jianxin Wang, Shaojie Tang, Zhenhua Zhao, Zehao Sun, Yu-E Sun, Liusheng Huang, and Hengchang Liu

A New Paradigm for Shortest Link Scheduling in Wireless Networks: Theory and Applications .................... 24
  Fahad Al-dhelaan, Peng-Jun Wan, and Huaqiang Yuan

CO₂: Design Fault-Tolerant Relay Node Deployment Strategy for Throwbox-Based DTNs ................................ 37
  Wenlin Han and Yang Xiao

CNFD: A Novel Scheme to Detect Colluded Non-technical Loss Fraud in Smart Grid .................................. 47
  Wenlin Han and Yang Xiao

SUO: Social Reciprocity Based Cooperative Mobile Data Traffic Communication ....................................... 56
  Kaichuan Zhao, Chao Wu, Yuezhi Zhou, Bowen Yang, and Yaoxue Zhang

Piggybacking Lightweight Control Messages on Physical Layer for Multicarrier Wireless LANs ................... 68
  Bing Feng, Chi Zhang, Lingbo Wei, and Yuguang Fang

Multi-focus Image Fusion via Region Mosaicing on Contrast Pyramids ................................................. 80
  Liguo Zhang, Jianguo Sun, Weimiao Feng, Junyu Lin, and Qing Yang

Distributed Constrained Optimization Over Cloud-Based Multi-agent Networks ....................................... 91
  Qing Ling, Wei Xu, Manxi Wang, and Yongcheng Li

Tensor Filter: Collaborative Path Inference from GPS Snippets of Vehicles ........................................... 103
  Hongtao Wang, Hui Wen, Feng Yi, Zhi Li, and Limin Sun

NFC Secure Payment and Verification Scheme for Mobile Payment ...................................................... 116
  Kai Fan, Panfei Song, Zhao Du, Haojin Zhu, Hui Li, Yintang Yang, Xinghua Li, and Chao Yang
Multi-path Reliable Routing with Pipeline Schedule in Wireless Sensor Networks .......................................................... 126
   Jinbao Li, Li Zhang, Longjiang Guo, Qianqian Ren, and Yahong Guo

A QoE-Aware Adaptive Spectrum Allocation Framework for Secondary Mobile Networks ........................................ 139
   Liu Cui and Taieb Znati

Joint Optimization of Downlink and D2D Transmissions for SVC Streaming in Cooperative Cellular Networks .................. 149
   Guangsheng Feng, Junyu Lin, Yongmin Zhang, Huiqiang Wang,
   Lin Cai, Qian Zhao, and Hongwu Lv

Identifying Discrepant Tags in RFID-enabled Supply Chains .................. 162
   Caidong Gu, Wei Gong, and Amiya Nayak

SHMDRS: A Smartphone-Based Human Motion Detection and Response System ............................................. 174
   Ke Lin, Siyao Cheng, Yingshu Li, Jianzhong Li, Hong Gao,
   and Hongzhi Wang

iRun: A Smartphone-Based System to Alert Runners to Warm Up Before Running ........................................... 186
   Zhenhua Zhao, Zehao Sun, Liusheng Huang, Hansong Guo,
   Jianxin Wang, and Hongli Xu

iBeaconing: A Low-Cost, Wireless Student Protection System .................. 197
   Blake Lucas, Liran Ma, and Dechang Chen

The Power Control Strategy for Mine Locomotive Wireless Network Based on Successive Interference Cancellation ..................... 207
   Lei Shi, Yi Shi, Zhenchun Wei, Guoxiang Zhou, and Xu Ding

ESRS: An Efficient and Secure Relay Selection Algorithm for Mobile Social Networks ........................................ 219
   Xiaoshuang Xing, Xiuzecheng Cheng, Huan Dai, Shengrong Gong,
   Feng Zhao, and Hongbin Qiu

Energy Detection of Gaussian Signals Subject to Impulsive Noise in Generalized Fading Channels ......................... 231
   José Vinícius de Miranda Cardoso, Wamberto José Lira Queiroz,
   Hang Liu, and Marcelo Sampaio de Alencar

Distance Bounding Protocol for RFID Systems .................. 241
   Yajian Zhou and Jingxian Zhou
Private Weighted Histogram Aggregation in Crowdsourcing
Shaowei Wang, Liusheng Huang, Pengzhan Wang, Hou Deng, Hongli Xu, and Wei Yang

Minimum Cost Spatial-Temporal Task Allocation in Mobile Crowdsensing
Jiapeng Yu, Mingjun Xiao, Guoju Gao, and Chang Hu

Mining Myself in the Community: Privacy Preserved Crowd Sensing and Computing
Lei Tan, Huiting Fan, Weikang Rui, Zhonghu Xu, Shuo Zhang, Jing Xu, and Kai Xing

Exploiting Spectrum Availability and Quality in Routing for Multi-hop Cognitive Radio Networks
Lichen Zhang, Zhipeng Cai, Peng Li, and Xiaoming Wang

Performance Analysis for High Dimensional Non-parametric Estimation in Complicated Indoor Localization
Yubin Zhao, Xiaopeng Fan, and Cheng-Zhong Xu

Minimum-Delay Data Aggregation Schedule in Duty-Cycled Sensor Networks
Xiaoting Yan, Hongwei Du, Qiang Ye, and Guoliang Song

Optimal Jamming Attack Schedule Against Wireless State Estimation in Cyber-Physical Systems
Lianghong Peng, Xianghui Cao, Changyin Sun, and Yu Cheng

An Enhanced Structure-Based De-anonymization of Online Social Networks
Hong Li, Cheng Zhang, Yunhua He, Xuezhen Cheng, Yan Liu, and Limin Sun

Self-learning Based Motion Recognition Using Sensors Embedded in a Smartphone for Mobile Healthcare
Di Lu, Junqi Guo, Xi Zhou, Guoxing Zhao, and Rongfang Bie

CrowdBlueNet: Maximizing Crowd Data Collection Using Bluetooth Ad Hoc Networks
Sicong Liu, Junzhao Du, Xue Yang, Rui Li, Hui Liu, and Kewei Sha

An Energy Efficient Multi-hop Routing Protocol for Terahertz Wireless Nanosensor Networks
Juan Xu, Rong Zhang, and Zhiyu Wang

Stackelberg Game Based Incentive Mechanism for Data Transmission in Mobile Opportunistic Networks
Jianhui Huang, Qin Hu, Jingping Bi, and Zhongcheng Li
Extensive Form Game Analysis Based on Context Privacy Preservation for Smart Phone Applications .................................................. 389
  Luyun Li, Shengling Wang, Junqi Guo, Rongfang Bie, and Kai Lin

A Novel Delay Analysis for Polling Schemes with Power Management Under Heterogeneous Environments .................................. 401
  Li Feng, Jiguo Yu, Jiemin Liang, Feng Zhao, and Yong Wang

Temporal-Spatial Aggregated Urban Air Quality Inference with Heterogeneous Big Data ......................................................... 414
  Xiaorong Lu, Yang Wang, Liusheng Huang, Wei Yang, and Yao Shen

Towards Scheduling to Minimize the Total Penalties of Tardiness of Delivered Data in Maritime CPSs (Invited Paper) ....................... 427
  Tingting Yang, Hailong Feng, Guoqing Zhang, Wenbo Zhang, Chengming Yang, Ruilong Deng, and Zhou Su

Spectrum-Aware Clustering with Proactive Handoff for Distributed Cognitive Radio Ad Hoc Networks ........................................ 440
  Huyin Zhang, Ning Xu, Fang Xu, and Zhiyong Wang

A Social Relation Aware Hybrid Service Discovery Mechanism for Intermittently Connected Wireless Network ............................. 452
  Dapeng Wu, Honggang Wang, and Ruyan Wang

The Improved Algorithm Based on DFS and BFS for Indoor Trajectory Reconstruction .............................................................. 464
  Min Li, Jingjing Fu, Yanfang Zhang, Zhujun Zhang, and Siye Wang

Feedback Reduction for Multiuser MIMO Broadcast Channel with Zero-Forcing Beamforming ................................................ 475
  Yu-Lun Tsai, Jin-Hao Li, and Hsuan-Jung Su

  Tommy Chin and Kaiqi Xiong

Toward Exposing Timing-Based Probing Attacks in Web Applications ................................................................. 499
  Jian Mao, Yue Chen, Futian Shi, Yaoqi Jia, and Zhenkai Liang

Collaborative Outsourced Data Integrity Checking in Multi-Cloud Environment .......................................................... 511
  Jian Mao, Jian Cui, Yan Zhang, Hanjun Ma, and Jianhong Zhang

An Adaptive Beaconing Scheme Based on Traffic Environment Parameters Prediction in VANETs ........................................ 524
  Jin Qian, Tao Jing, Yan Huo, Hui Li, Liran Ma, and Yanfei Lu
OSim: An OLAP-Based Similarity Search Service Solver for Dynamic Information Networks ........................................ 536
    Xiaoguang Niu, Yihao Zhang, Ting Huang, and Xiaoping Wu

Planning Roadside Units for Information Dissemination in Urban VANET . . 548
    Junyu Zhu, Chuanhe Huang, Xiying Fan, and Bin Fu

Channel Assignment with User Coverage Priority and Interference Optimization for Multicast Routing in Wireless Mesh Networks .......... 560
    Feng Zeng, Nan Zhao, Zhigang Chen, Hui Liu, and Wenjia Li

Performance Evaluation of Vehicular Ad Hoc Networks for Rapid Response Traffic Information Delivery . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 571
    Isaac J. Cushman, Danda B. Rawat, Lei Chen, and Qing Yang

Author Index ............................................. 581
Wireless Algorithms, Systems, and Applications
11th International Conference, WASA 2016, Bozeman, MT, USA, August 8-10, 2016. Proceedings
Yang, Q.; Yu, W.; Challal, Y. (Eds.)
2016, XV, 583 p. 260 illus., Softcover
ISBN: 978-3-319-42835-2