

Networking

Transactions Papers

647

Budget-Feasible Online Incentive Mechanisms for Crowdsourcing Tasks Truthfully

D. Zhao, X.-Yang Li, and H. Ma

662

Duplicate Detectable Opportunistic Forwarding in Duty-Cycled Wireless Sensor Networks

D. Liu, M. Hou, Z. Cao, J. Wang, Y. He, and Y. Liu

674

Has Time Come to Switch From Duty-Cycled MAC Protocols to Wake-Up Radio for Wireless Sensor Networks?

J. Oller, I. Demirkol, J. Casademont, J. Paradells, G. U. Gamm, and L. Reindl

688

Anonymity and Fairness in Packet Scheduling: A Quantitative Tradeoff

A. Mishra and P. Venkatasubramaniam

703

An Efficient Tag Search Protocol in Large-Scale RFID Systems With Noisy Channel

M. Chen, W. Luo, Z. Mo, S. Chen, and Y. Fang

717

A Framework for Dynamic Network Architecture and Topology Optimization

A. S. Shafiqh, B. Lorenzo, S. Glisic, J. Pérez-Romero, L. A. DaSilva, A. B. MacKenzie, and J. Röning

731

Internet With Transient Destination-Controlled Addressing

Z. Al-Qudah, E. Johnson, M. Rabinovich, and O. Spatscheck

745

Energy-Efficient IP Core Network Configuration Under General Traffic Demands

Z. Zhang, Y. Bejerano, and S. Antonakopoulos

759

Distributed Stochastic Optimization via Correlated Scheduling

M. J. Neely

773

Detecting Malicious Facebook Applications

S. Rahman, T.-K. Huang, H. V. Madhyastha, and M. Faloutsos

788

Analog Network Coding Without Restrictions on Superimposed Frames

X. Wang and W. Mao

806

Code-Based Neighbor Discovery Protocols in Mobile Wireless Networks

T. Meng, F. Wu, and G. Chen

820

Optimal Rate Allocation for Video Streaming in Wireless Networks With User Dynamics

V. Joseph, S. Borst, and M. I. Reiman

836

Online Coded Caching

R. Pedarsani, M. A. Maddah-Ali, and U. Niesen

846

GenePrint: Generic and Accurate Physical-Layer Identification for UHF RFID Tags

J. Han, C. Qian, P. Yang, D. Ma, Z. Jiang, W. Xi, and J. Zhao

859

Cooperative Routing With Relay Assignment in Multiradio Multihop Wireless Networks

K. Xie, X. Wang, J. Wen, and J. Cao

873

Fair Network Bandwidth Allocation in IaaS Datacenters via a Cooperative Game Approach

J. Guo, F. Liu, J. C. S. Lui, and H. Jin

A joint publication of the IEEE Communications Society, the IEEE Computer Society, and the ACM with its Special Interest Group on Data Communication (SIGCOMM)





Transactions Papers (Continued from Front Cover)

887

Real-Time Verification of Network Properties Using Atomic Predicates

H. Yang and S. S. Lam

901

iBUS: An Integrated Beamformer and Uplink Scheduler for OFDMA Small Cells

M. Y. Arslan, K. Sundaresan, S. V. Krishnamurthy, and S. Rangarajan

915

FluidNet: A Flexible Cloud-Based Radio Access Network for Small Cells

K. Sundaresan, M. Y. Arslan, S. Singh, S. Rangarajan, and S. V. Krishnamurthy

929

Least Cost Influence Maximization Across Multiple Social Networks

H. Zhang, D. T. Nguyen, H. Zhang, and M. T. Thai

940

Optimal Power Control in Rayleigh-Fading Heterogeneous Wireless Networks

C. W. Tan

954

Enhancing the Delay Performance of Dynamic Backpressure Algorithms

Y. Cui, E. M. Yeh, and R. Liu

968

Finding Nonequivalent Classifiers in Boolean Space to Reduce TCAM Usage

R. Wei, Y. Xu, and H. J. Chao

982

When Heavy-Tailed and Light-Tailed Flows Compete: The Response Time Tail Under Generalized Max-Weight Scheduling

J. Nair, K. Jagannathan, and A. Wierman

996

Enhancing Mobile Video Capacity and Quality Using Rate Adaptation, RAN Caching and Processing

H. A. Pedersen and S. Dey

1011

Private and Verifiable Interdomain Routing Decisions

M. Zhao, W. Zhou, A. J. T. Gurney, A. Haeberlen, M. Sherr, and B. T. Loo

1025

Exploiting Double Opportunities for Latency-Constrained Content Propagation in Wireless Networks

H. Cai, I. Koprulu, and N. B. Shroff

1038

A Traffic Load Balancing Framework for Software-Defined Radio Access Networks Powered by Hybrid Energy Sources

T. Han and N. Ansari

1052

Fast and Scalable Counterfeits Estimation for Large-Scale RFID Systems

W. Gong, I. Stojmenovic, A. Nayak, K. Liu, and H. Liu

1065

Combined Base Station Association and Power Control in Multichannel Cellular Networks

C. Singh, A. Kumar, and R. Sundaresan

1081

Robust and Cost-Effective Design of Cyber-Physical Systems: An Optimal Middleware Deployment Approach

D.-H. Shin, S. He, and J. Zhang

1095

SimpleMAC: A Simple Wireless MAC-Layer Countermeasure to Intelligent and Insider Jammers

S.-Y. Chang, Y.-C. Hu, and N. Laurenti

1109

Embedding IP Unique Shortest Path Topology on a Wavelength-Routed Network: Normal and Survivable Design

G. Agrawal and D. Medhi

1125

TCAM-Based Multi-Match Packet Classification Using Multidimensional Rule Layering

D.-Y. Chang and P.-C. Wang

1139

Optimal Secrecy Capacity-Delay Tradeoff in Large-Scale Mobile Ad Hoc Networks

X. Cao, J. Zhang, L. Fu, W. Wu, and X. Wang

1153

To Transmit or Not to Transmit? Distributed Queueing Games in Infrastructureless Wireless Networks

Z. Guan, T. Melodia, and G. Scutari

1167

Opportunistic Routing With Congestion Diversity in Wireless Ad Hoc Networks

A. Bhorkar, M. Naghshvar, and T. Javidi

1181

Dynamic Network Control for Confidential Multi-Hop Communications

Y. Sarikaya, C. E. Koksal, and O. Ercetin



Transactions Papers (Continued from p. 645)

1196

Backpressure Delay Enhancement for Encounter-Based Mobile Networks While Sustaining Throughput Optimality

M. Alresaini, K.-L. Wright, B. Krishnamachari, and M. J. Neely

1209

Detecting Problematic Control-Plane Protocol Interactions in Mobile Networks

G.-H. Tu, Y. Li, C. Peng, C.-Y. Li, and S. Lu

1223

Enhancing Video Accessibility and Availability Using Information-Bound References

A. Anand, A. Balachandran, A. Akella, V. Sekar, and S. Seshan

1237

The BGP Visibility Toolkit: Detecting Anomalous Internet Routing Behavior

A. Lutu, M. Bagnulo, C. Pelsser, O. Maennel, and J. Cid-Sueiro

1251

Exploiting Order Independence for Scalable and Expressive Packet Classification

K. Kogan, S. I. Nikolenko, O. Rottenstreich, W. Culhane, and P. Eugster

1265

Design of Scheduling Algorithms for End-to-End Backlog Minimization in Wireless Multi-Hop Networks Under K -Hop Interference Models

S. Zhao and X. Lin

1279

Learning in Hide-and-Seek

Q. Wang and M. Liu