Main Technical Program
Main Conference
The map of the rooms is available here
Tuesday, April 16
raesaay, ripin re
9:20 10:20 ODENING and KEVNOTE CREECH (Pages Auditorium)
8:30-10:30 OPENING and KEYNOTE SPEECH (Room: Auditorium)

10:30-11:00 Coffee break
11:00-12:30 ALL CONFERENCE PANEL (Room: Auditorium)
<b>12:30-14:00</b> Lunch break
14:00-15:30
Cloud computing and networks 1
Room: Sala 500
Chair: Krishna Kant (George Mason University, USA)

Main Technical Program
Shadow-Routing Based Dynamic Algorithms for Virtual Machine Placement in a Network Cloud
Yang Guo (Bell Labs, Alcatel-Lucent, USA); Alexander Stolyar (Bell Labs, Alcatel-Lucent, USA); Anwar Walid (Bell-labs, Alcatel Lucent, USA)
Dependable Virtual Machine Allocation
Hiroki Yanagisawa (IBM, Japan); Takayuki Osogami (IBM Research - Tokyo, Japan); Rudy Raymond (IBM Research - Tokyo, Japan)
PACE: Policy-Aware Application Cloud Embedding

Li (Erran) Li (Bell Labs, Lucent Technologies, USA); Vahid Liaghat (CS Dept, Maryland, USA);

Hongze Zhao (Tsinghua University, P.R. China); Mohammad Taghi Hajiaghayi (MIT, USA); Dan Li (Tsinghua University, P.R. China); Gordon Wilfong (Bell Labs, Alcatel-Lucent, USA); Y. Richard Yang (Yale University, USA); Chuanxiong Guo (Microsoft Research Asia, P.R. China)
Optimizing Data Access Latencies in Cloud Systems by Intelligent Virtual Machine Placement
Mansoor Alicherry (Bell Labs India, Alcatel-Lucent, India); T. V. Lakshman (Bell Labs, Alcatel-Lucent, USA)
Mobile security and privacy
Room: Londra
Chair: Faramarz Fekri (Georgia Institute of Technology, USA)

D2Taint: Differentiated and Dynamic Information Flow Tracking on Smartphones for Numerous Data Sources
Boxuan Gu (The Ohio State University, USA); Xinfeng Li (The Ohio State University, USA); Gang Li (the Ohio State University, USA); Adam C. Champion (The Ohio State University, USA); Zhezhe Chen (The Ohio State University, USA); Feng Qin (Ohio State University, USA); Dong Xuan (The Ohio State University, USA)
Privacy-preserving Spatiotemporal Matching
Jingchao Sun (Arizona State University, USA); Rui Zhang (Arizona State University, USA); Yanchao Zhang (Arizona State University, USA)
NetworkProfiler: Towards Automatic Fingerprinting of Android Apps
Shuaifu Dai (Peking University, P.R. China); Alok Tongaonkar (Narus Inc, USA); Xiaoyin Wang (University of California, Berkeley, USA); Antonio Nucci (Narus inc., USA); Dawn Song (CMU, USA)

Network economics and pricing 1
Room: Madrid
Chair: Jianwei Huang (The Chinese University of Hong Kong, Hong Kong)
An Economic Analysis of Regulating Security Investments in the Internet
MHR (Arman) Khouzani (Ohio State University, USA); Soumya Sen (Princeton University, USA); Ness B. Shroff (The Ohio State University, USA)
SPRING: A Strategy-Proof and Privacy Preserving Spectrum Auction Mechanism

Cognitive radio networks 1
Room: Istanbul
Chair: Kaushik Chowdhury (Northeastern University, USA)
DISCERN: Cooperative Whitespace Scanning in Practical Environments
Tarun Bansal (Ohio State University, USA); Bo Chen (Ohio State University, USA); Prasun Sinha (Ohio State University, USA)
Understanding Blackholes in Large-Scale Cognitive Radio Networks under Generic Failure
Lei Sun (NC State University, USA); Wenye Wang (NC State University, USA)

Scaling Network-based Spectrum Analyzer with Constant Communication Cost
Youngjune L Gwon (Harvard University, USA); Ht Kung (Harvard University, USA)
Alternate Hop-and-Wait Channel Rendezvous Method for Cognitive Radio Networks
I-Hsun Chuang (National Cheng Kung University, Taiwan); Hsiao-Yun Wu (NCKU, Taiwan); Kuan-Rong Lee (Kun Shan University of Technology, Taiwan); Yau Hwang Kuo (National Cheng Kung University, Taiwan)
Smart Grid
Room: Roma
Chair: Minghua Chen (The Chinese University of Hong Kong, Hong Kong)

Main Technical Program
Smoothing the Energy Consumption: Peak Demand Reduction in Smart Grid
Shao-Jie Tang (Illinois Institute of Technology, USA); Qiuyuan Huang (University of Florida, USA); Xiang-Yang Li (Illinois Institute of Technology, USA); Dapeng Oliver Wu (University of Florida, USA)
Tiona, osaj
Adaptive Electricity Scheduling in Microgrids
Yingsong Huang (Auburn University, USA); Shiwen Mao (Auburn University, USA); Mark Nelms
(Co-Chair, USA)
A Contract-Based Approach for Ancillary Services in V2G Networks: Optimality and Learning

Yang Gao (University of Maryland College Park, USA); Yan Chen (University of Maryland, College Park, USA); Chih-Yu Wang (National Taiwan University, Taiwan); K. J. Ray Liu (University of Maryland, USA)
Optimal Budget Deployment Strategy against Power Grid Interdiction
Xuan Liu (Illinois Institute of Technology, USA); Kui Ren (State University of New York at Buffalo, USA); Yanling Yuan (Illinois Institute of Technology, USA); Zuyi Li (Illinois Institute of Technology, USA); Qian Wang (Wuhan University, P.R. China)
Underwater and aerial sensor networks
Room: Copenhagen
Chair: Tommaso Melodia (State University of New York at Buffalo, USA)

Main Technical Program
Reducing Information Gathering Latency through Mobile Aerial Sensor Network
Zhaoquan Gu (Tsinghua University, P.R. China); Qiang-Sheng Hua (Tsinghua University, P.R. China); Amy Yuexuan Wang (Tsinghua University, P.R. China); Francis C.M. Lau (The University of Hong Kong, Hong Kong)
M-FAMA: A Multi-session MAC Protocol for Reliable Underwater Acoustic Streams
Seongwon Han (University of California, Los Angeles, USA); Youngtae Noh (Cisco Systems Inc., USA); Uichin Lee (KAIST, Korea); Mario Gerla (University of California at Los Angeles, USA)

Environment Aware Connectivity for Wireless Underground Sensor Networks

Xin Dong (University of Nebraska-Lincoln, USA); Mehmet Can Vuran (University of Nebraska-Lincoln, USA)
Toward Practical MAC Design for Underwater Acoustic Networks
Yibo Zhu (University of Connecticut, USA); Zaihan Jiang (U.S. Naval Research Lab, USA); Zheng Peng (University of Connecticut, USA); Michael Zuba (University of Connecticut, USA); Jun-Hong Cui (University of Connecticut, USA); Huifang Chen (Zhejiang University, P.R. China)
Ontical naturation
Optical networks
Room: Dublino
Chair: Eytan Modiano (MIT, USA)

Network Protection with Guaranteed Recovery Times using Recovery Domains
Gregory Kuperman (MIT, USA); Eytan Modiano (MIT, USA)
Shortest Path versus Multi-Hub Routing in Networks with Uncertain Demand
Alexandre Fréchette (University of British Columbia, Canada); Bruce Shepherd (McGill Unviersity, Canada); Marina Thottan (Bell Labs, USA); Peter Winzer (Lucent Technologies, USA)
Bounded-Reorder Packet Scheduling in Optical Cut-through Switch
Zhemin Zhang (Stony Brook University, USA); Zhiyang Guo (Stony Brook University, USA); Yuanyuan Yang (Stony Brook University, USA)

Cellular networks 1
Room: Lisbona
Chair: Ting He (IBM Research, USA)
iDEAL: Incentivized Dynamic Cellular Offloading via Auctions
Wei Dong (University of Texas at Austin, USA); Swati Rallapalli (University of Texas at Austin, USA); Rittwik Jana (AT&T Labs Research, USA); Lili Qiu (The University of Texas at Austin, USA); K. K. Ramakrishnan (AT&T Labs - Research, USA); Leo Razoumov (AT&T Research, USA); Yin Zhang (University of Texas at Austin, USA); Tae Won Cho (AT&T Labs, USA)
Exploiting Double Opportunities for Deadline Based Content Propagation in Wireless Net works

Han Cai (North Carolina State University, USA); Irem Koprulu (Ohio State University, USA); Ness B. Shroff (The Ohio State University, USA)
Using Poisson processes to model lattice cellular networks
Bartlomiej Błaszczyszyn (Inria-Ens, France); Mohamed Kadhem Karray (France Telecom R&D, France); Holger Keeler (Inria-Ens, France)
Cooperative Cell Outage Detection in Self-Organizing Femtocell Networks
Wei Wang (Hong Kong University of Science and Technology, Hong Kong); Jin Zhang (Hong Kong University of Science and Technology, P.R. China); Qian Zhang (Hong Kong University of Science and Technology, Hong Kong)
<b>15:30-16:00</b> coffee break

<b>Main Technical F</b>	Prograr	n
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Elisha Rosensweig (CloudBand, Alcatel-Lucent, Israel); Daniel S Menasche (Federal Universi	ty
of Rio de Janeiro, Brazil); Jim Kurose (University of Massachusetts at Amherst, USA)	

## On Arbitrating the Power-Performance Tradeoff in SaaS Clouds

Zhi Zhou (Huazhong University of Science and Technology, P.R. China); Fangming Liu (Huazhong University of Science and Technology, P.R. China); Hai Jin (Huazhong University of Science and Technology, P.R. China); Bo Li (Hong Kong University of Science and Technology, Hong Kong); Baochun Li (University of Toronto, Canada); Hongbo Jiang (Huazhong University of Science and Technology, P.R. China)

## Fast Mencius: Mencius with Low Commit Latency

Wei Wei (College of William and Mary, USA); Harry Tian Gao (College of William and Mary, USA); Fengyuan Xu (College of William and Mary, USA); Qun Li (College of William and Mary, USA)

Lu Shi (University of Arkansas at Little Rock, USA); Shucheng Yu (University of Arkansas at

Little Rock, USA); Wenjing Lou (Virginia Tech, USA); Thomas Hou (Virginia Tech, USA)
Protocol-level Hidden Server Discovery
Zhen Ling (Southeast University, P.R. China); Luo Junzhou (Southeast University, P.R. China); Kui Wu (University of Victoria, Canada); Xinwen Fu (University of Massachusetts Lowell, USA)
Cross-Domain Password-Based Authenticated Key Exchange Revisited
Liqun Chen (HP Laboratories, Bristol, United Kingdom); Hoon Wei Lim (Nanyang Technological University, Singapore); Guomin Yang (University of Wollongong, Australia)
Network economics and pricing 2

California, Berkeley, USA)

Content-peering Dynamics of Autonomous Caches in a Content-centric Network
Valentino Pacifici (Royal Institute of Technology (KTH), Sweden); György Dán (KTH, Royal Institute of Technology, Sweden)
Optimal Pricing for Local and Global WiFi Markets
Lingjie Duan (Singapore University of Technology and Design (SUTD), Singapore); Jianwei Huang (The Chinese University of Hong Kong, Hong Kong); Biying Shou (City University of Hong Kong, Hong Kong)
Cognitive radio networks 2
Room: Istanbul

Cooperative Multi-hop Relaying via Network Formation Games in Cognitive Radio

Main Technical Program
Networks
Wei Li (The George Washington University, USA); Xiuzhen Cheng (George Washington Univ, USA); Tao Jing (Beijing Jiaotong University, P.R. China); Xiaoshuang Xing (Beijing Jiao Tong University, P.R. China)
Energy-Efficient Cognitive Heterogeneous Networks Powered by the Smart Grid
Shengrong Bu (Carleton University, Canada); F. Richard Yu (Carleton University, Canada); Yi Qian (University of Nebraska–Lincoln, USA)
Energy efficiency in wireless networks

Room: Roma

Chair: Enzo Mingozzi (University of Pisa, Italy)

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Main Technical Program
Stochastic Analysis of Energy Savings with Sleep Mode in OFDMA Wireless Networks
Dimitrios Tsilimantos (INSA Lyon, France); Jean-Marie Gorce (INSA-Lyon, France); Eitan Altman (INRIA, France)
Practical algorithm for power efficient DRX configuration in next generation mobiles
Practical algorithm for power emcient DHX configuration in flext generation mobiles
R M Karthik (Samsung India Software Operations, India); Arvind Chakrapani (Samsung R&D,
India)
Competitive Ratio Analysis of Online Algorithms to Minimize Packet Transmission Time in Energy Harvesting Communication System

Main Technical Program
Rahul Vaze (TIFR Mumbai, India)
The Case for Re-configurable Backhaul in Cloud-RAN based Small Cell Networks
Cheng Liu (Georgia Institute of Technology, USA); Karthikeyan Sundaresan (NEC Labs America, USA); Meilong Jiang (InterDigital Communications, LLC, USA); Sampath Rangarajan (NEC Labs America, USA); Gee-Kung Chang (Georgia Tech, USA)
RFID
Room: Copenhagen
Chair: Xue Liu (McGill University, Canada)

An Efficient Protocol for RFID Multigroup Threshold-based Classification
Wen Luo (University of Florida, USA); Yan Qiao (University of Florida, USA); Shigang Chen (University of Florida, USA)
An Efficient Tag Search Protocol in Large-Scale RFID Systems
Min Chen (University of Florida, USA); Wen Luo (University of Florida, USA); Zhen Mo (University of Florida, USA); Shigang Chen (University of Florida, USA); Yuguang Fang (University of Florida, USA)
ZOE: Fast Cardinality Estimation for Large-Scale RFID Systems
Yuanqing Zheng (Nanyang Technological University, Singapore); Mo Li (Nanyang Technological University, Singapore)

P-MTI: Physical-layer Missing Tag Identification via Compressive Sensing
Yuanqing Zheng (Nanyang Technological University, Singapore); Mo Li (Nanyang Technological University, Singapore)
Network survivability
Room: Dublin
Chair: Eytan Modiano (Massachusetts Institute of Technology, USA)
Providing Protection in Multi-Hop Wireless Networks

Gregory Kuperman (MIT, USA); Eytan Modiano (MIT, USA)
Router Virtualization for Improving IP-level Resilience
János Tapolcai (Budapest University of Technology and Economics, Hungary); Gábor Rétvári (Budapest University of Technology and Economics, Hungary)
Tunable QoS-Aware Network Survivability
Jose Yallouz (Technion - Israel Institute of Technology, Israel); Ariel Orda (Technion, Israel)
Cellular networks 2

Main Technical Program
Location Patterns of Mobile Users: A Large Scale Study
Ashwin Sridharan (AT&T, USA); Jean Bolot (Technicolor, USA)
Network Control without CSI using Rateless Codes for Downlink Cellular Systems
Yin Sun (the Ohio State University, USA); Can Emre Koksal (The Ohio State University, USA) Sung-Ju Lee (HP Labs, USA); Ness B. Shroff (The Ohio State University, USA)
18:00-20:00 Reception
Wednesday, April 17

9:00-10:30
Cloud computing and networks 3
Room: Londra
Chair: Baochun Li (University of Toronto, Canada)
An Ensemble of Replication and Erasure Codes for Cloud File Systems
Yadi Ma (University of Wisconsin-Madison, USA); Thyaga Nandagopal (Alcatel-Lucent, USA); Krishna P. N. Puttaswamy (Bell Labs, Alcatel-Lucent, USA); Suman Banerjee (University of Wisconsin, USA)

To Offload or Not to Offload? The Bandwidth and Energy Costs of Mobile Cloud Computing
Marco Valerio Barbera (Sapienza University of Rome, Italy); Sokol Kosta (Sapienza University of Rome, Italy); Alessandro Mei (Sapienza University of Rome, Italy); Julinda Stefa (Sapienza University of Rome, Italy)
RapidRAID: Pipelined Erasure Codes for Fast Data Archival in Distributed Storage Systems
Lluis Pamies-Juarez (Nanyang Technological University, Singapore); Anwitaman Datta (Nanyang Technological University, Singapore); Frederique Oggier (Nanyang Technological University, Singapore)
NEST: Locality-aware Approximate Query Service for Cloud Computing
Yu Hua (Huazhong University of Science and Technology, P.R. China); Bin Xiao (The Hong Kong Polytechnic University, Hong Kong); Xue Liu (McGill University, Canada)

Ad hoc networks 1
Room: Madrid
Chair: Michele Garetto (Università di Torino, Italy)
On the Capacity of Wireless CSMA/CA Multihop Networks
Rafael Laufer (Bell Labs, Alcatel-Lucent, USA); Leonard Kleinrock (University of California, Los Angeles, USA)
On Interference Alignment for Multi-hop MIMO Networks

Main Technical Program
Huacheng Zeng (Virginia Tech, USA); Yi Shi (Intelligent Automation Inc., USA); Thomas Hou (Virginia Tech, USA); Wenjing Lou (Virginia Tech, USA); Sastry Kompella (Naval Research Laboratory, USA); Scott F Midkiff (Virginia Tech, USA)
On the Throughput-Delay Trade-off in Large-Scale MANETs with A Generalized i.i.d. Mobility Model
Wang Liu (Central South University, P.R. China); Kejie Lu (University of Puerto Rico at Mayaguez, Puerto Rico); Jianping Wang (City University of Hong Kong, Hong Kong); Yi Qian (University of Nebraska–Lincoln, USA); Liusheng Huang (University of Science and Technology of China, P.R. China); Jun Liu (NIC of Hunan Electric Power Corporation, P.R. China); Dapeng Oliver Wu (University of Florida, USA)
Distributed Approximation Algorithms for Link Scheduling and Local Broadcasting in the Physical Interference Model
Guanhong Pei (Virginia Tech, USA); Vullikanti S Anil Kumar (Virginia Tech, USA)

Cognitive radio networks 3
Room: Istanbul
Chair: Shiwen Mao (Auburn University, USA)
Non-parametric Passive Traffic Monitoring in Cognitive Radio Networks
Qiben Yan (Virginia Tech, USA); Ming Li (Utah State University, USA); Feng Chen (Virginia Tech, USA); Tingting Jiang (Virginia Tech, USA); Wenjing Lou (Virginia Tech, USA); Thomas Hou (Virginia Tech, USA); Chang-Tien Lu (Virginia Tech, USA)
To Stay Or To Switch: Multiuser Dynamic Channel Access

Main Technical Program
Yang Liu (University of Michigan, Ann Arbor, USA); Mingyan Liu (University of Michigan, USA)
Exploiting Self-Interference Suppression for Improved Spectrum Awareness/Efficiency in Cognitive Radio Systems
Wessam Afifi (University of Arizona, USA); Marwan Krunz (University of Arizona, USA)
Leveraging Load Migration and Basestaion Consolidation for Green Communications in Virtualized Cognitive Radio Networks
Xiang Sheng (Syracuse University, USA); Jian Tang (Syracuse University, USA); Chenfei Gao (Syracuse University, USA); Weiyi Zhang (AT&T Labs Research, USA); Chonggang Wang (InterDigital Communications, USA)

Wireless LAN 1
Room: Roma
Chair: Dimitrios Koutsonikolas (University of Buffalo, SUNY, USA)
Cooperative Packet Recovery in Enterprise WLANs
Mahanth Gowda (Duke University, USA); Souvik Sen (HP Labs, USA); Romit Roy Choudhury (Duke University, USA); Sung-Ju Lee (HP Labs, USA)
Selfish Misbehavior Detection in 802.11 Based Wireless Networks: An Adaptive Approach Based on Markov Decision Process
Jin Tang (Illinois Institute of Technology, USA); Yu Cheng (Illinois Institute of Technology, USA)

Main Technical Program
HoWiES: A Holistic Approach to ZigBee Assisted WiFi Energy Savings in Mobile Devices
Yifan Zhang (College of William and Mary, USA); Qun Li (College of William and Mary, USA)
WiFi-BA: Choosing Arbitration over Backoff in High Speed Multicarrier Wireless Networks
Pei Huang (Michigan State University, USA); Xi Yang (Michigan State University, USA); Li Xiao (Michigan State University, USA)
Sensor coverage and topology control
Room: Copenhagen

Chair: Mo Li (Nanyang Technological University, Singapore)

Main Technical Program
When Target Motion Matters: Doppler Coverage In Radar Sensor Networks
Xiaowen Gong (Arizona State University, USA); Junshan Zhang (Arizona State University, USA)
USA); Douglas Cochran (Arizona State University, USA)
Adaptive Approximation Algorithms for Hole Healing in Hybrid Wireless Sensor
Networks
Yilin Shen (University of Florida, USA); Dung T. Nguyen (University of Florida, USA); My T. Tha
(University of Florida, USA)
Approximations for Minimum Connected Sensor Cover

Lidong Wu (UT Dallas, USA); Hongwei Du (Harbin Institute of Technology Shenzhen Graduate School, P.R. China); Weili Wu (UT Dallas, USA); Deying Li (Renmin University of China, P.R. China); Jing Lv (Harbin Institute of Technology Shenzhen Graduate School, P.R. China); Wonjun Lee (Korea University, Korea)

## On Wireless Network Coverage in Bounded Areas

Zuoming Yu (College of Zhangjiagang, Jiangsu University of Science and Technogoly, P.R. China); Jin Teng (The Ohio State University, USA); Xinfeng Li (The Ohio State University, USA); Dong Xuan (The Ohio State University, USA)

## Router and switch design

Room: Dublino

Chair: Bin Liu (Tsinghua University, P.R. China)

A Benes Packet Network
Longbo Huang (University of California, Berkeley, USA); Jean Walrand (University of California Berkeley, USA)
FIFA: Fast Incremental FIB Aggregation
Yaoqing Liu (University of Memphis, USA); Beichuan Zhang (University of Arizona, USA); Lan Wang (University of Memphis, USA)
A Trie Merging Approach with Incremental Updates for Virtual Routers
Layong Luo (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Gaogang Xie (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China);

Kavé Salamatian (LISTIC PolyTech, Université de Savoie Chambery Annecy, France); Steve Uhlig (Queen Mary, University of London, United Kingdom); Laurent Mathy (University of Liège, Belgium); Yingke Xie (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China)

# Compressing Forwarding Tables

Ori Rottenstreich (Technion, Israel); Marat Radan (Technion, Israel); Yuval Cassuto (Technion, Israel); Isaac Keslassy (Technion, Israel); Carmi Arad (Marvell Israel, Israel); Tal Mizrahi (Marvell, Israel); Yoram Revah (Industry- Marvell Israel, Israel); Avinatan Hassidim (Google, Israel)

10:30-11:00 coffee break

11:00-12:30

Cloud pricing and cost optimization
Room: Londra
Chair: György Dán (KTH, Royal Institute of Technology, Sweden)
The Constrained Ski-Rental Problem and its Application to Online Cloud Cost Optimization
Ali Khanafer (University of Illinois at Urbana-Champaign, USA); M. Kodialam (Bell Labs, USA); Krishna P. N. Puttaswamy (Bell Labs, Alcatel-Lucent, USA)
An Efficient Distributed Algorithm for Resource Allocation in Large-Scale Coupled Systems
Di Niu (University of Alberta, Canada); Baochun Li (University of Toronto, Canada)

Main Technical Program
A Framework for Truthful Online Auctions in Cloud Computing with Heterogeneous Use Demands
Hong Zhang (Huazhong University of Science and Technology, P.R. China); Bo Li (Hong Kong University of Science and Technology, Hong Kong); Hongbo Jiang (Huazhong University of Science and Technology, P.R. China); Fangming Liu (Huazhong University of Science and Technology, P.R. China); Athanasios V. Vasilakos (National Technical University of Athens, Greece); Jiangchuan Liu (Simon Fraser University, Canada)
Resource Pricing Game in Geo-distributed Clouds
Heejun Roh (Korea University, Korea); Cheoulhoon Jung (Korea University, Korea); Wonjun Lee (Korea University, Korea); Ding-Zhu Du (University of Texas, Dallas, USA)
Ad hoc networks 2

An Efficient DoF Scheduling Algorithm for Multi-hop MIMO Networks
Huacheng Zeng (Virginia Tech, USA); Yi Shi (Intelligent Automation Inc., USA); Thomas Hou (Virginia Tech, USA); Wenjing Lou (Virginia Tech, USA)
Diff-Max: Separation of Routing and Scheduling in Backpressure-Based Wireless Networks
Hulya Seferoglu (Massachusetts Institute of Technology, USA); Eytan Modiano (MIT, USA)
Cognitive radio networks 4
Room: Istanbul
Chair: Kaushik Chaudhury (Northeastern University, USA)

Main Technical Program
Virtual Backbone Construction for Cognitive Radio Networks without Common Control Channel
Ying Dai (Temple University, USA); Jie Wu (Temple University, USA); ChunSheng Xin (Norfolk State University, USA)
Channel Quality Prediction Based on Bayesian Inference in Cognitive Radio Networks
Xiaoshuang Xing (Beijing Jiao Tong University, P.R. China); Tao Jing (Beijing Jiaotong University, P.R. China); Yan Huo (Beijing Jiaotong University, P.R. China); Hongjuan Li (The George Washington University, USA); Xiuzhen Cheng (George Washington Univ, USA)
FMAC: A Fair MAC Protocol for Coexisting Cognitive Radio Networks

Yanxiao Zhao (South Dakota School of Mines and Technology, USA); Min Song (The University of Toledo, USA); ChunSheng Xin (Norfolk State University, USA)
Event-driven Spectrum-Aware Clustering in Cognitive Radio Sensor Networks
Mustafa Ozger (Koc University, Turkey); Ozgur B. Akan (Koc University, Turkey)
Wireless LAN 2
Room: Roma
Chair: Joerg C. Widmer (Institute IMDEA Networks, Spain)

CUTS: Improving Channel Utilization in Both Time and Spatial Domains in WLAN

Haochao Li (HKUST, Hong Kong); Kaishun Wu (HKUST, Hong Kong); Qian Zhang (Hong Kong University of Science and Technology, Hong Kong); Lionel Ni (Hong Kong University of Science and Technology, Hong Kong)
Distributed Spectrum Assignment for Home WLANs
Julien Herzen (EPFL, Switzerland); Ruben Merz (Telekom Innovation Laboratories, Germany); Patrick Thiran (EPFL, Switzerland)
Virtual MISO Triggers in WiFi-like Networks
Oscar Bejarano (Rice University, USA); Edward W. Knightly (Rice University, USA)

Delay Analysis and Study of IEEE 802.11p based DSRC Safety Communication in a Highway Environment
Yuan Yao (McGill University, Canada); Lei Rao (General Motors Research Lab, USA); Xue Liu (McGill University, Canada); Xingshe Zhou (Northwestern Polytechnical University, P.R. China

**Sensor networks 1** 

Chair: Carla-Fabiana Chiasserini (Politecnico di Torino, Italy)

Dynamic Switching-based Reliable Flooding in Low-Duty-Cycle Wireless Sensor Networks

Long Cheng (Singapore University of Technology and Design, Singapore); Yu Gu (Singapore University of Technology and Design, Singapore); Tian He (University of Minnesota, USA); Jianwei Niu (Beihang University, P.R. China)
Fault Tolerant Complex Event Detection in WSNs: A Case Study in Structural Health Monitoring
Xuefeng Liu (The Hong Kong Polytechnic University, Hong Kong); Jiannong Cao (Hong Kong Polytechnic Univ, Hong Kong); Shaojie Tang (Illinois Institute of Technology, USA)
Optimal Incentive-driven Design of Participatory Sensing Systems
lordanis Koutsopoulos (University of Thessaly and CERTH, Greece)

# Efficient 3G Budget Utilization in Mobile Participatory Sensing Applications

Hengchang Liu (UIUC, USA); Shaohan Hu (University of Illinois at Urbana-Champaign, USA); Wei Zheng (University of Wisconsin - Madison, USA); Zhiheng Xie (University of Virginia, USA); Shiguang Wang (University of Illinois at Urbana Champaign, USA); Pan Hui (Deutsche Telekom Laboratories, Germany); Tarek Abdelzaher (University of Illinois, Urbana Champaign, USA)
Network measurement and analysis
Room: Dublino
Chair: Marco Mellia (Politecnico di Torino, Italy)
Pegasus: Precision Hunting for Icebergs and Anomalies in Network Flows
Sriharsha Gangam (Purdue University, USA); Puneet Sharma (HP Labs Palo Alto, USA); Sonia

Yang Liu (Iowa State University, USA); Wenji Chen (Iowa State University, USA); Yong Guan (Iowa State University, USA)
<b>12:30-14:00</b> Lunch break
14:00-15:30
Resource allocation in cloud computing 1
Room: Sala 500
Chair: Florin Ciucu (T-Labs / TU Berlin, Germany)

A New Analytical Technique for Designing Provably Efficient MapReduce Schedulers
Yousi Zheng (Ohio State University, USA); Ness B. Shroff (The Ohio State University, USA); Prasun Sinha (Ohio State University, USA)
Map Task Scheduling in MapReduce with Data Locality: Throughput and Heavy-Traffic Optimality
Weina Wang (Arizona State University, USA); Kai Zhu (Arizona State University, USA); Lei Ying (Arizona State University, USA); Jian Tan (IBM Research, USA); Li Zhang (IBM T. J. Watson Research Center, USA)
Coupling Task Progress for MapReduce Resource-Aware Scheduling
Jian Tan (IBM Research, USA); Xiaoqiao Meng (IBM T. J. Watson Research Center, USA); Li Zhang (IBM T. J. Watson Research Center, USA)

Improving ReduceTask Data Locality for Sequential MapReduce Jobs
Jian Tan (IBM Research, USA); Shicong Meng (IBM TJ Watson Research Center, USA); Xiaoqiao Meng (IBM T. J. Watson Research Center, USA); Li Zhang (IBM T. J. Watson Research Center, USA)
Security and privacy 2
Room: Londra
Chair: Xiaojiang Du (Temple University, USA)
An Optimized Design of Reconfigurable PSD Accelerator for Online Shrew DDoS Attacks Detection

Main	Technical	Program

Hao Chen (State University of New York - Binghamton, USA); Yu Chen (State University of New York - Binghamton, USA); Douglas Summerville (State University of New York at Binghamton, USA); Zhou Su (Waseda University, Japan)
Cardinality Change-based Early Detection of Large-scale Cyber-Attacks
Wenji Chen (Iowa State University, USA); Yang Liu (Iowa State University, USA); Yong Guan (Iowa State University, USA)
A Traceback Attack on Freenet
Guanyu Tian (Florida State University, USA); Zhenhai Duan (Florida State University, USA); Todd Baumeister (University of Hawaii, Manoa, USA); Yingfei Dong (University of Hawaii, USA)

# PPBD A Piracy Preventing System for BT DHT Networks

Hongli Zhang (Harbin Institute of Technology, P.R. China); Jiantao Shi (Harbin Institute of Technology, P.R. China); Xiaojiang Du (Temple University, USA)
Ad hoc networks 3
Room: Madrid
Chair: Xin Wang (Stony Brook University, USA)
Content-centric wireless networks with limited buffers: when mobility hurts
Giuseppa Alfano (Politecnico di Torino, Italy); Michele Garetto (Università di Torino, Italy); Emilio Leonardi (Politecnico di Torino, Italy)

Main Technical Program
Double Regression: Efficient Spatially Correlated Path loss Model for Wireless Network Simulation
Seon Yeong Han (KAIST, Korea); Nael Abu-Ghazaleh (State University of New York at Binghamton, USA); Dongman Lee (KAIST, Korea)
A (min,x)-Network Calculus for Multi-Hop Fading Channels
Hussein Al-Zubaidy (University of Toronto, Canada); Jorg Liebeherr (University of Toronto, Canada); Almut Burchard (University of Toronto, Canada)
Economic-Robust Transmission Opportunity Auction in Multi-hop Wireless Networks
Ming Li (Mississippi State University, USA); Pan Li (Mississippi State University, USA); Miao

Pan (Texas Southern University, USA); Jinyuan (Stella) Sun (University of Tennessee, USA)
Cognitive radio networks 5
Room: Istanbul
Chair: Jian Tang (Syracuse University, USA)
Mobile Access of Wide-Spectrum Networks: Design, Deployment and Experimental Evaluation
Anastasios Giannoulis (Rice University, USA); Paul Patras (Hamilton Institute, National
University of Ireland Maynooth, Ireland); Edward W. Knightly (Rice University, USA)

Socially-optimal Multi-hop Secondary Communication under Arbitrary Primary User Mechanisms
Hongxing Li (The University of Hong Kong, USA); Chuan Wu (The University of Hong Kong, Hong Kong); Zongpeng Li (University of Calgary, Canada); Francis C.M. Lau (The University of Hong Kong, Hong Kong)
On Optimal Communication Strategies for Cooperative Cognitive Radio Networking
Bin Cao (Harbin Institute of Technology Shenzhen Graduate School, P.R. China); Jon Mark (University of Waterloo, Canada); Qinyu Zhang (Shenzhen Graduate School, Harbin Institute of Technology, P.R. China); Rongxing Lu (University of Waterloo, Canada); Xiaodong Lin (University of Ontario Institute of Technology, Canada); Sherman Shen (University of Waterloo, Canada)
Capacity Scaling of Cognitive Networks: Beyond Interference-Limited Communication
Sang-Woon Jeon (EPFL, Switzerland); Michael Gastpar (University of California, Berkeley,

USA)
Wireless mesh networks
Room: Roma
Chair: Renato Lo Cigno (University of Trento, Italy)
Capacity Gain through Power Enhancement in Multi-Radio Multi-Channel Wireless Networks
Devu Manikantan Shila (IIT, USA); Yu Cheng (Illinois Institute of Technology, USA)

GaS: A Gateway Scheduling-based Handoff Scheme in Single-radio Infrastructure Wireless Mesh Networks
Haopeng Li (University of North Carolina at Charlotte, USA); Linda Jiang Xie (University of North Carolina at Charlotte, USA)
Comparison of Routing Metrics in 802.11n Wireless Mesh Networks
Ramanujan K Sheshadri (University at Buffalo, SUNY, USA); Dimitrios Koutsonikolas (University at Buffalo, SUNY, USA)
Trading Off Distortion for Delay for Video Transmissions in Wireless Networks
Zi Feng (University of California, Riverside, USA); George Papageorgiou (UC Riverside, USA); Srikanth V. Krishnamurthy (University of California, Riverside, USA); Ramesh Govindan (University of Southern California, USA); Tom La Porta (Penn State University, USA)

Main Technical Program
Sensor networks 2
Room: Copenhagen
Chair: Yu Gu (Singapore University of Technology and Design, Singapore)
Bundling Mobile Base Station and Wireless Energy Transfer: Modeling and Optimization
Liguang Xie (Virginia Tech, USA); Yi Shi (Intelligent Automation Inc., USA); Thomas Hou (Virginia Tech, USA); Wenjing Lou (Virginia Tech, USA); Hanif Sherali (Virginia Tech, USA); Scott F Midkiff (Virginia Tech, USA)
Application-Aware Data Collection in Wireless Sensor Networks

Xiaolin Fang (Harbin Institute of Technology, P.R. China); Hong Gao (University of Harbin
Institute Technology, P.R. China); Jianzhong Li (Harbin Institute of Technology, P.R. China)
Yingshu Li (Georgia State University, USA)

#### Data Loss and Reconstruction in Sensor Networks

Linghe Kong (Shanghai Jiao Tong University, P.R. China); Mingyuan Xia (McGill University, Canada); Xiao-Yang Liu (Shanghai Jiao Tong University, P.R. China); Min-You Wu (Shanghai JiaoTong University, P.R. China); Xue Liu (McGill University, Canada)

## ε-Approximation to Data Streams in Sensor Networks

Guohua Li (Harbin Institute of Technology, P.R. China); Jianzhong Li (Harbin Institute of Technology, P.R. China); Hong Gao (University of Harbin Institute Technology, P.R. China)

Xun Fan (University of Southern California, Information Sciences Institute, USA); John

Heidemann (University of Southern California, USA); Ramesh Govindan (University of Southern

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California, USA)
Event Detection using Customer Care Calls
Yi-Chao Chen (University of Texas at Austin, USA); Gene Moo Lee (University of Texas at Austin, USA); Nick Duffield (AT&T Labs - Research, USA); Lili Qiu (The University of Texas at Austin, USA); Jia Wang (AT&T Labs - Research, USA)
Decentralizing Network Inference Problems with Multiple-Description Fusion Estimation (MDFE)
Mehdi Malboubi (University of California, Davis, USA); Cuong Vu (UC Davis, USA); Chen-Nee Chuah (University of California, Davis, USA); Puneet Sharma (HP Labs Palo Alto, USA)
Overlay and peer-to-peer networks

Room: Lisbona
Chair: Haojin Zhu (Shanghai Jiao Tong University, P.R. China)
Hybrid Client-Server and Peer-to-Peer Caching Systems with Selfish Peers
Youngmi Jin (KAIST, Korea); Yung Yi (KAIST, Korea); George Kesidis (Pennsylvania State University, USA); Fatih Kocak (The Pennsylvania State University, USA); Jinwoo Shin (Georgia Institute of Technology, USA)
Can P2P Networks be Super-Scalable?
Francois Baccelli (INRIA-ENS, France); Fabien Mathieu (INRIA, France); Ilkka Norros (VTT Technical Research Centre of Finland, Finland); Rémi Varloot (INRIA, France)

16:00-17:30

Resource allocation in cloud computing 2
Room: Sala 500
Chair: Fangming Liu (Huazhong University of Science and Technology, P.R. China)
Scheduling Jobs with Unknown Duration in Clouds
Siva Theja Maguluri (University of Illinois Urbana Champaign, USA); R. Srikant (University of Illinois at Urbana-Champaign, USA)
FCD: Fast-Concurrent-Distributed Load Balancing under Switching Costs and Imperfect Observations

Main Technical Program
Furong Huang (University of California, Irvine, USA); Animashree Anandkumar (University of California Irvine, USA)
Optimal Bounds for Online Page Migration with Generalized Migration Costs
Johannes Schneider (IBM Research, Switzerland); Stefan Schmid (T-Labs & TU Berlin, Germany)
Resource Placement and Assignment in Distributed Network Topologies
Yuval Rochman (Tel-Aviv University, Israel); Hanoch Levy (Tel Aviv University, Israel); Eli Brosh (Vidyo, USA)

Security and privacy 3
Room: Londra
Chair: Yingfei Dong (University of Hawaii, USA)
Combining Supervised and Unsupervised Learning for Zero-Day Malware Detection
Prakash Mandayam Comar (Michigan State University, USA); Lei Liu (Michigan State University, USA); Sabyasachi Saha (Narus Inc., USA); Pang-Ning Tan (Michigan State University, USA); Antonio Nucci (Narus inc., USA)
Turbo Covert Channel: An Iterative Framework for Covert Communication Over Data Networks
Seyed Ali Ahmadzadeh (University of Waterloo, Canada); Gordon Agnew (University of Waterloo, Canada)

A Difference Resolution Approach to Compressing Access Control Lists
James Daly (Michigan State University, USA); Alex X. Liu (Michigan State University, USA); Eric Torng (Michigan State University, USA)
On Finding an Optimal TCAM Encoding Scheme for Packet Classification
Ori Rottenstreich (Technion, Israel); Isaac Keslassy (Technion, Israel); Avinatan Hassidim (Google, Israel); Haim Kaplan (Tel-Aviv University, Israel); Ely Porat (Bar Ilan University, Israel)
Mobile Opportunistic Networks 1
Room: Madrid

Main Technical Program
Chair: Yanmin Zhu (Shanghai Jiao Tong University, P.R. China)
Wakeup Scheduling For Energy-Efficient Communication in Opportunistic Mobile Network
Wei Gao (University of Tennessee, USA); Qinghua Li (Pennsylvania State University, USA)
Providing Probabilistic Guarantees on the Time of Information Spread in Opportunistic Networks
Yoora Kim (The Ohio State University, USA); Kyunghan Lee (Ulsan National Institute of Science and Technology, Korea); Ness B. Shroff (The Ohio State University, USA); Injong Rhee (North Carolina State University, USA)

Characterizing Link Connectivity for Opportunistic Mobile Networking: Does Mobility Suffice?
Chul-Ho Lee (North Carolina State University, USA); Jaewook Kwak (North Carolina State University, USA); Do Young Eun (North Carolina State University, USA)
TOUR: Time-sensitive Opportunistic Utility-based Routing in Delay Tolerant Networks
Mingjun Xiao (University of Science and Technology of China, P.R. China); Jie Wu (Temple University, USA); Cong Liu (Sun Yat-sen University, P.R. China); Liusheng Huang (University of Science and Technology of China, P.R. China)
Spectrum pricing
Room: Istanbul
Chair: Eitan Altman (INRIA, France)

Main Technical Program
Core-Selecting Combinatorial Auction Design for Secondary Spectrum Markets
Yuefei Zhu (University of Toronto, Canada); Baochun Li (University of Toronto, Canada); Zongpeng Li (University of Calgary, Canada)
Zongpeng Er (Oniversity of Galgary, Ganada)
Hybrid Pricing for TV White Space Database
Xiaojun Feng (Hong Kong University of Science and Technology, Hong Kong); Qian Zhang (Hong Kong University of Science and Technology, Hong Kong); Jin Zhang (Hong Kong University of Science and Technology, P.R. China)
Balance of revenue and social welfare in FCC's spectrum allocation

Yanjiao Chen (Hong Kong University of Science and Technology, Hong Kong); Lingjie Duan (Singapore University of Technology and Design (SUTD), Singapore); Jianwei Huang (The Chinese University of Hong Kong, Hong Kong); Qian Zhang (Hong Kong University of Science and Technology, Hong Kong)
Groupon in the Air: A Three-stage Auction Framework for Spectrum Group-buying
Peng Lin (HKUST, Hong Kong); Xiaojun Feng (Hong Kong University of Science and Technology, Hong Kong); Qian Zhang (Hong Kong University of Science and Technology, Hong Kong); Mounir Hamdi (Hong Kong University of Science and Technology, P.R. China)
Wireless cross-layer design
Room: Roma
Chair: Changhee Joo (UNIST, Korea)

Main Technical Program
Distributed CSMA with Pairwise Coding
Nathaniel Jones (MIT, USA); Brooke Shrader (MIT Lincoln Laboratory, USA); Eytan Modiano (MIT, USA)
Distributed Cross-Layer Optimization in Wireless Networks: A Second-Order Approach
Jia Liu (Ohio State University, USA); Cathy Xia (Ohio-State University, USA); Ness B. Shroff (The Ohio State University, USA); Hanif Sherali (Virginia Tech, USA)
Wireless Scheduling for Network Utility Maximization with Optimal Convergence Speed
Bin Li (Ohio State University, USA); Atilla Eryilmaz (Ohio State University, USA); Ruogu Li (The Ohio State University, USA)

Scalable Algorithms for Wireless Link Schedulings in Multi-Channel Multi-Radio Wireless Networks
Peng-Jun Wan (Illinois Institute of Technology, USA); Xiaohua Jia (City University of Hong Kong, Hong Kong); Guo-Jun Dai (School of Computer Science, Hangzhou DianZi University, P.R. China); Hongwei Du (Harbin Institute of Technology Shenzhen Graduate School, P.R. China); Zhiguo Wan (Tsinghua University, P.R. China); Ophir Frieder (Georgetown University, USA)
Sensor networks 3
Room: Copenhagen
Chair: Francesca Cuomo (University of Rome "La Sapienza", Italy)
Optimizing the Collection of Local Decisions for Time-Constrained Distributed Detection

in WSNs
Seksan Laitrakun (Georgia Institute of Technology, USA); Edward Coyle (Georgia Institute of Technology, USA)
Mobile Data Gathering with Wireless Energy Replenishment in Rechargeable Sensor Networks
Songtao Guo (Chongqing University, P.R. China); Cong Wang (State University of New York at Stony Brook, USA); Yuanyuan Yang (Stony Brook University, USA)
Low-Latency SINR-based Data Gathering in Wireless Sensor Networks
Dawei Gong (Stony Brook University, USA); Yuanyuan Yang (Stony Brook University, USA)

A Digital Watermarking Approach to	Secure and Precise	Range Query	Processing in
Sensor Networks			

Yeqing Yi (Hunan University, P.R. China); Rui Li (Hunan University, P.R. China); Fei Chen (MSU/VMware, USA); Alex X. Liu (Michigan State University, USA); Yaping Lin (Hunan University, P.R. China)

## **Network modelling**

Room: Dublin

Chair: Lachlan L.H. Andrew (Swinburne University of Technology, Australia)

Towards Scalable Network Emulation: Channel Accuracy Versus Implementation Resources

Pengda Huang (Southern Methodist University, USA); Matthew Tonnemacher (Southern Methodist University, USA); Yongjiu Du (Southern Methodist University, USA); Dinesh Rajan (Southern Methodist University, USA); Joseph D. Camp (Southern Methodist University, USA)
2.5K-Graphs: from Sampling to Generation
Minas Gjoka (University of California, Irvine, USA); Maciej Kurant (ETH Zurich, Switzerland); Athina Markopoulou (University of California, Irvine, USA)
Maximizing Submodular Set Function with Connectivity Constraint: Theory and Application to Networks
Tung-Wei Kuo (Academia Sinica, Taiwan); Kate Ching-Ju Lin (Academia Sinica, Taiwan); Ming-Jer Tsai (National Tsing Hua University, Taiwan)

NSF Informational Session on Sustainability
Room: Lisbona
NSF Information Session on Sustainability
Kricho Kont (NCT)
Krisha Kant (NSF)
Thursday, April 18
9:00-10:30

Data center networking
Room: Sala 500
Chair: Holger Karl (University of Paderborn, Germany)
On the Impact of Packet Spraying in Data Center Networks
Advait A Dixit (Purdue University, USA); Pawan Prakash (Purdue University, USA); Y. Charlie Hu (Purdue University, USA); Ramana Rao Kompella (Purdue University, USA)
A Cooperative Game Based Allocation for Sharing Data Center Networks

Jian Guo (Huazhong University of Science and Technology, P.R. China); Fangming Liu (Huazhong University of Science and Technology, P.R. China); Dan Zeng (Huazhong University of Science and Technology, P.R. China); John Chi Shing Lui (Chinese University of Hong Kong, Hong Kong); Hai Jin (Huazhong University of Science and Technology, P.R. China)

## Intra-Data-Center Traffic Engineering with Ensemble Routing

Ziyu Shao (The Chinese University of Hong Kong, Hong Kong); Xin Jin (Princeton University, USA); Wenjie Jiang (Princeton University, USA); Minghua Chen (The Chinese University of Hong Kong, P.R. China); Mung Chiang (Princeton University, USA)

## Minimizing Flow Completion Times in Data Centers

Ali Munir (Michigan State University, USA); Ihsan A Qazi (Lahore University of Management Sciences, Pakistan); Zartash Afzal Uzmi (Lahore University of Management Sciences, Pakistan); Aisha Mushtaq (Lahore University of Management Sciences, Pakistan); Saad Ismail (Lahore University of Management Sciences, Pakistan); Muhammad Safdar Iqbal (Lahore University of Management Sciences, Pakistan); Basma Khan (Lahore University of Management Sciences, Pakistan)

Main Technical Program
Wireless security and privacy 1
Room: Londra
Noom. Londia
Chair: Yong Guan (Iowa State University, USA)
Exchanging Pairwise Secrets Efficiently
Iris Safaka (EPFL, Switzerland); Christina Fragouli (EPFL, Switzerland); Katerina Argyraki
(EPFL, Switzerland); Suhas Diggavi (University of California Los Angeles, USA)
OPFKA: Secure and Efficient Ordered-Physiological-Feature-based Key Agreement for

Tong University, P.R. China)

Wireless Body Area Networks
Chunqiang Hu (The George Washington University, USA); Xiuzhen Cheng (George Washington Univ, USA); Fan Zhang (The George Washington University, USA); Dengyuan Wu (The George Washington University, USA); Xiaofeng Liao (Chongqing University, P.R. China); Dechang Chen (Uniformed Services University of the Health Sciences, USA)
Extracting Secret Key from Wireless Link Dynamics in Vehicular Environments
Xiaojun Zhu (Nanjing University, P.R. China); Fengyuan Xu (College of William and Mary, USA); Edmund Novak (William and Mary, USA); Chiu C. Tan (Temple University, USA); Qun Li (College of William and Mary, USA); Guihai Chen (Shanghai Jiao Tong University, P.R. China)

Fast Secret Key Generation in Static Wireless Networks: A Virtual Channel Approach

Pengfei Huang (Shanghai Jiao Tong University, P.R. China); Xudong Wang (Shanghai Jiao

Main Technical Program
Mobile Opportunistic Networks 2
Room: Madrid
Chair: Paolo Giaccone (Politecnico di Torino, Italy)
A Privacy-preserving Social-assisted Mobile Content Dissemination Scheme in DTNs
Linke Guo (University of Florida, USA); Chi Zhang (University of Science of Technology of China, USA); Hao Yue (University of Florida, USA); Yuguang Fang (University of Florida, USA)
Self-Interest-Drive Incentives for Ad Dissemination in Autonomous Mobile Social Networks

Ting Ning (University of Louisiana at Lafayette, USA); Zhipeng Yang (University of Louisiana at Lafayette, USA); Hongyi Wu (University of Louisiana at Lafayette, USA); Zhu Han (University of Houston, USA)
Homing Spread: Community Home-based Multi-copy Routing in Mobile Social Networks
Jie Wu (Temple University, USA); Mingjun Xiao (University of Science and Technology of China, P.R. China); Liusheng Huang (University of Science and Technology of China, P.R. China)

Wi-Fi Sensing: Should Mobiles Sleep Longer As They Age?

Jaeseong Jeong (KAIST, Korea); Yung Yi (KAIST, Korea); Jeong-woo Cho (Royal Institute of Technology (KTH), Sweden); Do Young Eun (North Carolina State University, USA); Song Chong (KAIST, Korea)

Shimin Gong (Nanyang Technological University, Singapore); Ping Wang (Nanyang

Technological University, Singapore); Wei Liu (Huazhong University of Science and Technology, P.R. China); Weihua Zhuang (University of Waterloo, Canada)
QuickSense: Fast and Energy-Efficient Channel Sensing for Dynamic Spectrum Access Networks
Sungro Yoon (North Carolina State University, USA); Li (Erran) Li (Bell Labs, Lucent Technologies, USA); Soung Chang Liew (The Chinese University of Hong Kong, Hong Kong); Romit Choudhury (Duke University, USA); Injong Rhee (North Carolina State University, USA); Kun Tan (Microosft Research Asia, P.R. China)
Scheduling of Sequential Periodic Sensing for Cognitive Radios
Qiang Liu (Stony Brook University, USA); Xin Wang (Stony Brook University, USA); Yong Cui (Tsinghua University, P.R. China)

Network coding
Room: Roma
Chair: Athina Markopoulou (University of California, Irvine, USA)
Wireless network coding with partial overhearing information
Georgios S. Paschos (Massachusetts Institute of Technology, USA); Constantinos Fragiadakis (University of Thessaly, Greece); Leonidas Georgiadis (Aristotle University of Thessaloniki, Greece); Leandros Tassiulas (University of Thessaly, Greece)
Cooperative Pipelined Regeneration in Distributed Storage Systems
Jun Li (University of Toronto, Canada); Xin Wang (Fudan University, P.R. China); Baochun Li (University of Toronto, Canada)

Main Technical Program
Analysis and Construction of Functional Regenerating Codes with Uncoded Repair for Distributed Storage Systems
Yuchong Hu (Institute of Network Coding, Hong Kong); Patrick Pak-Ching Lee (The Chinese University of Hong Kong, Hong Kong); Kenneth W. Shum (Institute of Network Coding, Hong Kong)
A Graph Minor Perspective to Network Coding: Connecting Algebraic Coding with Network Topologies
Xunrui Yin (Fudan University, P.R. China); Yan Wang (Fudan University, P.R. China); Xin Wang (Fudan University, P.R. China); Xiangyang Xue (Fudan University, P.R. China); Zongpeng Li (University of Calgary, Canada)
Sensor networks 4

Room: Copenhagen
Chair: Mario Gerla (University of California at Los Angeles, USA)
Topology Dependent Space Filling Curves for Sensor Networks and Applications
Xiaomeng Ban (Stony Brook University, USA); Mayank Goswami (Stony Brook University, USA); Wei Zeng (Florida International University, USA); David Gu (Stony Brook University, USA); Jie Gao (Stony Brook University, USA)
SINUS: A Scalable and Distributed Routing Algorithm with Guaranteed Delivery for WSNs on High Genus 3D Surfaces
Tianlong Yu (Huazhong University of Science and Technology, P.R. China); Hongbo Jiang (Huazhong University of Science and Technology, P.R. China); Guang Tan (SIAT, Chinese Academy of Sciences, P.R. China); Chonggang Wang (InterDigital Communications, USA); Chen Tian (Huazhong University of Science and Technology, P.R. China); Yu Wu (Huazhong

Traffic engineering

When the cure is worse than the disease: the impact of graceful IGP operations on BGP
Laurent Vanbever (Université Catholique de Louvain, Belgium); Stefano Vissicchio (Université Catholique de Louvain, Belgium); Luca Cittadini (Roma Tre University, Italy); Olivier Bonaventure (Université catholique de Louvain, Belgium)

10:30-11:00 coffee break

11:00-12:30

## Social computing and networks

Room: Sala 500

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SA); icent

A Genealogy of Information Spreading on Microblogs:a Galton-Watson-based Explicative Model
Dong Wang (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Hosung Park (Department of Computer Science, KAIST, Korea); Gaogang Xie (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China); Sue Moon (KAIST, Korea); Mohamed Ali Kaafar (INRIA, France); Kavé Salamatian (LISTIC PolyTech, Université de Savoie Chambery Annecy, France)
VoteTrust: Leveraging Friend Invitation Graph to Defend against Social Network Sybils
Jilong Xue (Peking University, P.R. China); Zhi Yang (Peking University, P.R. China); Xiaoyong Yang (Peking University, P.R. China); Xiao Wang (Renren Inc., P.R. China); Lijiang Chen (HP Labs, P.R. China); Yafei Dai (Peking University, P.R. China)
Wireless security and privacy 2

Room: Londra
Chair: Patrick Pak-Ching Lee (The Chinese University of Hong Kong, Hong Kong)
ARTSense: Anonymous Reputation and Trust in Participatory Sensing
Xinlei (Oscar) Wang (University of California, Davis, USA); Wei Cheng (University of Massachusetts Lowell, USA); Prasant Mohapatra (University of California, Davis, USA); Tarek Abdelzaher (University of Illinois, Urbana Champaign, USA)
Secure Crowdsourcing-Based Cooperative Spectrum Sensing
Rui Zhang (Arizona State University, USA); Jinxue Zhang (Arizona State University, USA); Yanchao Zhang (Arizona State University, USA); Chi Zhang (University of Science of Technology of China, USA)

YouSense: Mitigating Entropy Selfishness in Distributed Collaborative Spectrum Sensing  Shuai Li (Shanghai Jiao Tong University, P.R. China); Haojin Zhu (Shanghai Jiao Tong University, P.R. China); Zhaoyu Gao (Shanghai Jiaotong University, P.R. China); Xinping Guan (Shanghai Jiao Tong University, P.R. China); Kai Xing (University of Science and Technology of China, P.R. China)  Rejecting the Attack: Source Authentication for Wi-Fi Management Frames using CSI Information  Zhiping Jiang (Xian Jiaotong University, P.R. China); Jizhong Zhao (Xi'an Jiaotong University,
University, P.R. China); Zhaoyu Gao (Shanghai Jiaotong University, P.R. China); Xinping Guan (Shanghai Jiao Tong University, P.R. China); Kai Xing (University of Science and Technology of China, P.R. China)  **Rejecting the Attack: Source Authentication for Wi-Fi Management Frames using CSI Information**
Information
Zhiping Jiang (Xian Jiaotong University, P.R. China); Jizhong Zhao (Xi'an Jiaotong University,
P.R. China); Xiang-Yang Li (Illinois Institute of Technology, USA); Jinsong Han (Xi'an Jiaotong University, P.R. China); Wei Xi (Xi'an Jiaotong University, P.R. China)
Vehicular Networks 1  Room: Madrid

Main Technical Program
Chair: Falko Dressler (University of Innsbruck, Austria)
Horizon on the Move: Geocast in Intermittently Connected Vehicular Ad Hoc Networks
Yujin Li (North Carolina State University, USA); Wenye Wang (NC State University, USA)
Integrity-Oriented Content Transmission in Highway Vehicular Ad Hoc Networks
Tom Luan (University of Waterloo, Canada); Sherman Shen (University of Waterloo, Canada); Fan Bai (General Motors, USA)
On-road Ads Delivery Scheduling and Bandwidth Allocation in Vehicular CPS

Main Technical Program
Xu Li (State University of New York at Buffalo, USA); Chunming Qiao (State University of New York at Buffalo, USA); Yunfei Hou (State University of New York at Buffalo, USA); Yunjie Zhao (State University of New York at Buffalo, USA); Aditya Wagh (State University of New York at Buffalo, USA); Adel Sadek (State University of New York at Buffalo, USA); Liusheng Huang (University of Science and Technology of China, P.R. China); Hongli Xu (University of Science and Technology of China, P.R. China)
CCR: Capacity-Constrained Replication for Data Delivery in Vehicular Networks
Yuchen Wu (Shanghai Jiao Tong University, P.R. China); Yanmin Zhu (Shanghai Jiao Tong University, P.R. China); Hongzi Zhu (Shanghai Jiao Tong University, P.R. China); Bo Li (Hong Kong University of Science and Technology, Hong Kong)
Localization

Room: Istanbul

Beyond Convex Relaxation: A Polynomial-Time Non-Convex Optimization Approach to Network Localization

Main Technical Program
Senshan Ji (The Chinese University of Hong Kong, Hong Kong); Kam-Fung Sze (The Chinese University of Hong Kong, Hong Kong); Zirui Zhou (The Chinese University of Hong Kong, Hong Kong); Anthony Man-Cho So (The Chinese University of Hong Kong, Hong Kong); Yinyu Ye (Stanford University, USA)
APT: Accurate Outdoor Pedestrian Tracking with Smartphones
Xiaojun Zhu (Nanjing University, P.R. China); Qun Li (College of William and Mary, USA); Guihai Chen (Shanghai Jiao Tong University, P.R. China)
Wireless networks 1
Room: Roma
Chair: Michela Meo (Politecnico di Torino, Italy)

Main Technical Program
Performance of Low-Complexity Greedy Scheduling Policies in Multi-Channel Wireless Networks: Optimal Throughput and Near-Optimal Delay
Bo Ji (The Ohio State University, USA); Gagan R Gupta (AT&T Labs, USA); Xiaojun Lin (Purdue University, USA); Ness B. Shroff (The Ohio State University, USA)
Improving the Delay Performance of CSMA Algorithms: A Virtual Multi-Channel Approach
Po-Kai Huang (Purdue University, USA); Xiaojun Lin (Purdue University, USA)
Channel Assignment in Dense MC-MR Wireless Networks: Scaling Laws and Algorithms

Rahul Urgaonkar (BBN Technologies, USA); Ram Ramanathan (BBN Technologies, USA);

Compact Conformal Map for Greedy Routing in Wireless Mobile Sensor Networks

Main Technical Program
SiMing Li (Stony Brook University, USA); Wei Zeng (Florida International University, USA); Dengpan Zhou (Stony Brook University, USA); David Gu (Stony Brook University, USA); Jie Gao (Stony Brook University, USA)
On the security vulnerabilities of the virtual force approach to mobile sensor deployment
Novella Bartolini (Sapienza University of Rome, Italy); Giancarlo Bongiovanni (University of Rome La Sapienza, Italy); Tom La Porta (Penn State University, USA); Simone Silvestri (Pennsylvania State University, USA)

Efficient Distributed Multiple-Message Broadcasting in Unstructured Wireless Networks

Dongxiao Yu (The University of Hong Kong, Hong Kong); Qiang-Sheng Hua (Tsinghua University, P.R. China); Amy Yuexuan Wang (Tsinghua University, P.R. China); Jiguo Yu (Qufu Normal University, P.R. China); Francis C.M. Lau (The University of Hong Kong, Hong Kong)

ERCD: An Energ	av-efficient (	Clone	Detection	Protocol	in	<b>WSNs</b>	Zhond	ımina

Zhongming Zheng (University of Waterloo, Canada); Anfeng Liu (Center South University, P.R. China); Lin X. Cai (Huawei, USA); Zhigang Chen (Central South University, P.R. China); Sherman Shen (University of Waterloo, Canada)
Scheduling and buffer management
Room: Dublino
Chair: Georgios S. Paschos (Massachusetts Institute of Technology, USA)

Capacity Provisioning for Schedulers with Tiny Buffers

Yashar Ghiassi-Farrokhfal (University of Toronto, Canada) and Jorg Liebeherr (University of Toronto, Canada)
Delay Optimal Policies Offer Very Little Privacy
Sachin Kadloor (University of Illinois at Urbana Champaign, USA); Negar Kiyavash (University of Illinois at Urbana-Champaign, USA)
Online Packet Scheduling with Hard Deadlines in Multihop Communication Networks
Zhoujia Mao (The Ohio State University, USA); Can Emre Koksal (The Ohio State University, USA); Ness B. Shroff (The Ohio State University, USA)
To send or not to send: Reducing the cost of data transmission

Leana Golubchik (USC, USA); Samir Khuller (University of Maryland at College Park, USA); Koyel Mukherjee (University of Maryland at College Park, USA); Yuan Yao (University of Southern California, USA)
12:30-14:00 Lunch break
14:00-15:30
Cloud security and privacy 1
Room: Sala 500
Chair: Athanasios V. Vasilakos (National Technical University of Athens, Greece)

Privacy Preserving Cloud Data Access With Multi-Authorities
Taeho Jung (Illinois Institute of Technology, USA); Xiang-Yang Li (Illinois Institute of Technology, USA); Zhiguo Wan (Tsinghua University, P.R. China)
Privacy-Preserving Data Aggregation without Secure Channel: Multivariate Polynomial Evaluation
Taeho Jung (Illinois Institute of Technology, USA); Xiang-Yang Li (Illinois Institute of Technology, USA); Shao-Jie Tang (Illinois Institute of Technology, USA)
Prometheus: Privacy-Aware Data Retrieval on Hybrid Cloud
Zhigang Zhou (Harbin Institute of Technology, P.R. China); Hongli Zhang (Harbin Institute of Technology, P.R. China); Xiaojiang Du (Temple University, USA); Panpan Li (Harbin Institute of Technology, P.R. China); Xiangzhan Yu (Harbin Institute of Technology, P.R. China)

Efficient Privacy-Preserving Biometric Identification in Cloud Computing
Jiawei Yuan (University of Arkansas at Little Rock, USA); Shucheng Yu (University of Arkansas at Little Rock, USA)
Wireless security and privacy 3
Room: Londra
Chair: Shigang Chen (University of Florida, USA)
Characterizing Privacy Leakage of Public WiFi Networks for Users on Travel

Ningning Cheng (University of California, Davis, USA); Xinlei (Oscar) Wang (University of California, Davis, USA); Wei Cheng (University of Massachusetts Lowell, USA); Prasant Mohapatra (University of California, Davis, USA); Aruna Seneviratne (University of New South Wales, Australia)
Analysis on Perfect Location Spoofing Attacks Using Beamforming
Ting Wang (Virginia Tech, USA); Yaling Yang (Virginia Tech, USA)
Countering Selfish Misbehavior in Multi-channel MAC Protocols
Yan Zhang (University of Arizona, USA); Loukas Lazos (University of Arizona, USA)
Secrecy Capacity Maximization for Secure Cooperative Ad-hoc Networks

Dies Han (University of Taukuba, Japan), Jie Li (University of Taukuba, Japan)
Biao Han (University of Tsukuba, Japan); Jie Li (University of Tsukuba, Japan)
Vehicular Networks 2
Room: Madrid
Chair: Claudio E. Casetti (Politecnico di Torino, Italy)
A performance analysis of CSMA based broadcast protocol in VANETs
Tien Viet Nguyen (ENS, France); Francois Baccelli (INRIA-ENS, France); Kai Zhu (Arizona State University, USA); Sundar Subramanian (Qualcomm, USA); Xinzhou Wu (Qualcomm, USA)

Connectivity in Two-Dimensional Lattice Networks
Lei Zhang (University of Victoria, Canada); Lin Cai (University of Victoria, Canada); Jianping Pan (University of Victoria, Canada)
Compressive Sensing based Monitoring with Vehicular Networks
Hongjian Wang (Shanghai Jiao Tong University, P.R. China); Yanmin Zhu (Shanghai Jiao Tong University, P.R. China); Qian Zhang (Hong Kong University of Science and Technology, Hong Kong)
ZOOM: Scaling the Mobility for Fast Opportunistic Forwarding in Vehicular Networks
Hongzi Zhu (Shanghai Jiao Tong University, P.R. China); Mianxiong Dong (University of Waterloo, Canada); Shan Chang (Xi'an JiaoTong University, P.R. China); Yanmin Zhu (Shanghai Jiao Tong University, P.R. China); Minglu Li (Shanghai Jiao Tong University, P.R. China); Sherman Shen (University of Waterloo, Canada)

Main Technical Program
Localization and location privacy
Room: Istanbul
Chair: Wensheng Zhang (Iowa State University, USA)
WheelLoc: Enabling Continuous Location Service on Mobile Phone for Outdoor
Scenarios
He Wang (Duke University, USA); Zhiyang Wang (University of California, Los Angeles, USA);
Shen Guobin (Microsoft Research Asia, P.R. China); Fan Li (Microsoft Research Asia, P.R. China); Song Han (Tsinghua University, P.R. China); Feng Zhao (Microsoft Research, USA)

Extend Your Journey: Introducing Signal Strength into Location-based Applications
Chih-Chuan Cheng (Academia Sinica, Taiwan); Pi-Cheng Hsiu (Academia Sinica, Taiwan)
Location Privacy in Database-driven Cognitive Radio Networks: Attacks and Countermeasures
Zhaoyu Gao (Shanghai Jiaotong University, P.R. China); Haojin Zhu (Shanghai Jiao Tong University, P.R. China); Yao Liu (University of South Florida, USA); Muyuan Li (Shanghai Jiao Tong University, P.R. China); Zhenfu Cao (Shanghai Jiao Tong University, P.R. China)
Search Me If You Can: Privacy-preserving Location Query Service
Taeho Jung (Illinois Institute of Technology, USA); Xiang-Yang Li (Illinois Institute of Technology, USA)

Wireless networks 2
Room: Roma
Chair: Wenye Wang (NC State University, USA)
Interference coordination in wireless networks: a flow-level perspective
Richard Combes (Orange Labs, France); Zwi Altman (Orange Labs, France); Eitan Altman (INRIA, France)
Streaming Codes for Channels with Burst and Isolated Erasures

Ahmed Badr (University of Toronto, Canada); Ashish Khisti (University of Toronto, Canada); Wai-tian Tan (Hewlett-Packard, USA); John Apostolopoulos (Hewlett-Packard Labs, USA)
CEDAR: An Optimal and Distributed Strategy for Packet Recovery In Wireless Networks
Chenxi Qiu (Clemson University, USA); Haiying Shen (Clemson University, USA); Sohraab Soltani (University of Texas at Tyler, USA); Karan Sapra (Clemson University, USA); Hao Jiang (Clemson University, USA); Jason O. Hallstrom (Clemson University, USA)
Stability Analyses of Static Greedy Link Schedulings in MC-MR Wireless Networks
Peng-Jun Wan (Illinois Institute of Technology, USA); Zhiguo Wan (Tsinghua University, P.R. China); Zhu Wang (Illinois Institute of Technology, USA); Xiaohua Xu (The University of Toledo USA); Shaojie Tang (Illinois Institute of Technology, USA); Xiaohua Jia (City University of Hong Kong, Hong Kong)

Sensor networks 6
Room: Copenhagen
Chair: Silvia Giordano (SUPSI, Switzerland)
PSR: Practical Synchronous Rendezvous in Low-duty-cycle Wireless Networks
Hao Huang (University of Nebraska-Lincoln, USA); Jihoon Yun (University of Nebraska-Lincoln, USA); Ziguo Zhong (University of Nebraska - Lincoln, USA); Song Min Kim (University of Minnesota, USA); Tian He (University of Minnesota, USA)
I^2C: A Holistic Approach to Prolong the Sensor Network Lifetime
Yang Peng (Iowa State University, USA); Zi Li (Iowa State University, USA); Daji Qiao (Iowa

State University, USA); Wensheng Zhang (Iowa State University, USA)
Measurement and Analysis on the Packet Delivery Performance in A Large Scale Sensor Network
Wei Dong (Zhejiang University, P.R. China); Yunhao Liu (Tsinghua University, P.R. China); Yuan He (Tsinghua University, P.R. China); Tong Zhu (Hong Kong University of Science and Technology, Hong Kong)
Link Scanner: Faulty Link Detection for Wireless Sensor Networks
Qiang Ma (Hong Kong University of Science and Technology, Hong Kong); Kebin Liu (Hong Kong University of Science and Technology, Hong Kong); Xiangrong Xiao (National University of Defence Technology, P.R. China); Zhichao Cao (HKUST, Hong Kong); Yunhao Liu (Tsinghua University, P.R. China)

Multimedia networking
Room: Dublino
Chair: Rong Zheng (McMaster University, Canada)
Capacity of P2P On-Demand Streaming with Simple, Robust and Decentralized Control
Can Zhao (Purdue University, USA); Jian Zhao (The University of Hong Kong, Hong Kong); Xiaojun Lin (Purdue University, USA); Chuan Wu (The University of Hong Kong, Hong Kong)
Alaojun Lin (Furdue Oniversity, OSA), Ondan Wu (The Oniversity of Floring Rong, Floring Rong)
Optimizing Stored Video Delivery For Mobile Networks: The Value of Knowing the Future
optimizing diorea video benvery for mobile Networks. The value of Knowing the Fatare
Zheng Lu (The University of Texas at Austin, USA); Gustavo de Veciana (The University of
Texas at Austin, USA)

Main Technical Program
Impact of Flow-level Dynamics on QoE of Video Streaming in Wireless Networks
Yuedong Xu (INRIA, France); Salah Eddine Elayoubi (Orange Labs, France); Eitan Altman (INRIA, France); Rachid El-Azouzi (LIA/CERI University of Avignon, France)
How much can large-scale Video-On-Demand benefit from users' cooperation?
Delia Ciullo (INRIA Sophia Antipolis, France); Valentina Martina (Politecnico di Torino, Italy); Michele Garetto (Università di Torino, Italy); Emilio Leonardi (Politecnico di Torino, Italy)
<b>15:30-16:00</b> coffee break

16:00-17:30

Cloud security and privacy 2
Room: Sala 500
Chair: Anat Bremler-Barr (Interdisciplinary Center Herzliya, Israel)
Protecting Cloud Data Using Dynamic Inline Fingerprint Checks
Fang Hao (Bell Labs, Alcatel-Lucent, USA); M. Kodialam (Bell Labs, USA); T. V. Lakshman (Bell Labs, Alcatel-Lucent, USA); Krishna P. N. Puttaswamy (Bell Labs, Alcatel-Lucent, USA)
Outsourcing Privacy-Preserving Social Networks to a Cloud

Guojun Wang (Central South University, P.R. China); Qin Liu (Central South University, USA); Feng Li (Indiana University-Purdue University Indianapolis, USA); Shuhui Yang (Purdue University Calumet, USA); Jie Wu (Temple University, USA)
DAC-MACS: Effective Data Access Control for Multi-Authority Cloud Storage Systems
Kan Yang (City University of Hong Kong, Hong Kong); Xiaohua Jia (City University of Hong Kong, Hong Kong); Kui Ren (State University of New York at Buffalo, USA); Bo Zhang (City University of Hong Kong, Hong Kong)
Public Auditing for Shared Data with Efficient User Revocation in the Cloud
Boyang Wang (Xidian University, P.R. China); Baochun Li (University of Toronto, Canada); Hui Li (Xidian University, P.R. China)

Main Technical Program
Wireless security and privacy 4
Room: Londra
Chair: Xinwen Fu (University of Massachusetts Lowell, USA)
Is Random Walk Truly Memoryless - Traffic analysis and source location privacy under random walks
Rui Shi (Stony Brook University, USA); Mayank Goswami (Stony Brook University, USA); Jie Gao (Stony Brook University, USA); David Gu (Stony Brook University, USA)
PIPAC: Patient Infusion Pattern based Access Control Scheme for Wireless Insulin Pump Syste

Main Technical Program	งเลเท	Tech	nıcaı	Proc	ıram
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Xiali Hei (Temple University, USA); Xiaojiang Du (Temple University, USA); Shan L	in (Te	mple
University, USA); Insup Lee (University of Pennsylvania, USA)		

## Mutual Privacy-Preserving Regression Modeling in Participatory Sensing

Kai Xing (University of Science and Technology of China, P.R. China); Zhiguo Wan (Tsinghua University, P.R. China); Pengfei Hu (University of Science and Technology of China, P.R. China); Haojin Zhu (Shanghai Jiao Tong University, P.R. China); Yuepeng Wang (University of Science and Technology of China, P.R. China); Xi Chen (State Grid Corporation of China, P.R. China); Yang Wang (University of Science and Technology of China, P.R. China); Liusheng Huang (University of Science and Technology of China, P.R. China)

## Fast and Practical Secret Key Extraction by Exploiting Channel Response

Hongbo Liu (Stevens Institute of Technology, USA); Yan Wang (Stevens Institute of Technology, USA); Jie Yang (Oakland University, USA); Yingying Chen (Stevens Institute of Technology, USA)

Long-fei Shangguan (Hong Kong University of Science and Technology, Hong Kong); Zhenjiang
Li (Nanyang Technological University, Singapore); Zheng Yang (Tsinghua University, P.R.
China); Mo Li (Nanyang Technological University, Singapore); Yunhao Liu (Tsinghua University,
P.R. China)

## RSS-Ratio for Enhancing Performance of RSS-based Applications

Wei Cheng (University of Massachusetts Lowell, USA); Kefeng Tan (University of California, Davis, USA); Victor Omwando (UC-Davis, USA); Jindan Zhu (University of California, Davis, USA); Prasant Mohapatra (University of California, Davis, USA)

## O(1)-Approximation to Physical World by Sensor Networks

Siyao Cheng (Harbin Institute of Technology, P.R. China); Jianzhong Li (Harbin Institute of Technology, P.R. China); Zhipeng Cai (Georgia State University, USA)

Xinxin Liu (University of Florida, USA); Kaikai Liu (University of Florida, USA); Linke Guo (University of Florida, USA); Xiaolin Li (University of Florida, USA); Yuguang Fang (University of Florida, USA)

Truthful Incentive Mechanisms for K-Anonymity Location Privacy

Dejun Yang (Arizona State University, USA); Xi Fang (Arizona State University, USA); Guoliang Xue (Arizona State University, USA)

Main Technical Program
Checking in without Worries: Location Privacy in Location Based Social Networks
Xinxin Zhao (Arizona State University, USA); Lingjun Li (Arizona State University, USA); Guoliang Xue (Arizona State University, USA)
n-CD: A Geometric Approach to Preserving Location Privacy in Location-Based Services
Ming Li (Mississippi State University, USA); Sergio Salinas (Mississippi State University, USA); Arun Thapa (Mississippi State University, USA); Pan Li (Mississippi State University, USA)
Wireless networks 3
Room: Roma

Main Technical Program
Chair: Chiara Petrioli (University of Rome "La Sapienza", Italy)
Gap Sense: Lightweight Coordination of Heterogeneous Wireless Devices
Xinyu Zhang (University of Wisconsin-Madison, USA); Kang G. Shin (University of Michigan, USA)
Predicting Length of Stay at WiFi Hotspots
Justin G Manweiler (IBM, USA); Naveen Kumar Santhapuri (Duke University, USA); Romit Roy Choudhury (Duke University, USA); Srihari Nelakuditi (University of South Carolina, USA)
Approximate Online Learning for Passive Monitoring of Multi-channel Wireless Networks

Rong Zheng (McMaster University, Canada); Thanh Le (University of Houston, USA); Zhu Har (University of Houston, USA)
Optimal Dynamic Power Control for Full-Duplex Bidirectional-Channel Based Wireless Networks
Wenchi Cheng (Xidian University, P.R. China); Xi Zhang (Texas A&M University, ECE Department, USA); Hailin Zhang (Xidian University, P.R. China)
Sensor networks 7
Room: Copenhagen
Chair: Zhipeng Cai (Georgia State University, USA)

Main Technical Program
RaSMaLai: A Randomized Switching Algorithm for Maximizing Lifetime in Tree-based Wireless Sensor Networks
Sk Kajal Arefin Imon (University of Texas at Arlington, USA); Adnan Khan (The University of Texas at Arlington, USA); Mario Di Francesco (Aalto University, Finland); Sajal K. Das (University of Texas at Arlington, USA)
Minimizing Charging Delay in Wirelessly Rechargeable Sensor Networks

Lingkun Fu (Zhejiang University, P.R. China); Peng Cheng (Zhejiang University, P.R. China); Yu Gu (Singapore University of Technology and Design, Singapore); Jiming Chen (Zhejiang University, P.R. China); Tian He (University of Minnesota, USA)

Energy Efficient Neighborhood Maintenance and Medium Access with Wake on Idle

Franck Rousseau (Grenoble INP / LIG, France); Maria Isabel Vergara Gallego (Grenoble INP, France)
ZiFind: Exploiting Cross-Technology Interference Signatures for Energy-Efficient Indoor Localization
Yuhang Gao (School of Computer Science and Engineering, Beihang University, P.R. China); Jianwei Niu (Beihang University, P.R. China); Ruogu Zhou (Michigan State University, USA); Guoliang Xing (Michigan State University, USA)
Flow and congestion control
Room: Dublino
Chair: Fabio Martignon (Université Paris-Sud, France)

Receiver-Based Flow Control for Networks in Overload
Chih-ping Li (MIT, USA); Eytan Modiano (MIT, USA)
Does It Hurt When Others Prosper? Exploring the Impact of Heterogeneous Reordering Robustness of TCP
Chengdi Lai (University of Hong Kong, Hong Kong); Ka-Cheong Leung (The University of Hong Kong, Hong Kong); Victor O. K. Li (University of Hong Kong, P.R. China)
Low-latency and high bandwidth TCP/IP protocol processing through an integrated HW/SW approach
Ken Inoue (IBM, USA); Davide Pasetto (IBM, USA); Karol Lynch (IBM, Ireland); Massimiliano Meneghin (IBM Technology Campus, Ireland); Kay Muller (IBM, Ireland); John Sheehan (IBM, Ireland)

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

Jayakrishnan Unnikrishnan Nair (California Institute of Technology, USA); Krishna P Jagannathan (Indian Institute of Technology Madras, India); Adam C Wierman (California Institute of Technology, USA)