

DR. LIN GAO

CONTACT INFORMATION

Associate Professor
Department of EIE, Harbin Institute of Technology, Shenzhen
Building C, HIT Campus, Nanshan District, Shenzhen, China (518055)
<http://www.hitsz.edu.cn/teacher/view/id-1309.html>

Tel: (+86) 755-2603-3608
Cell: (+86) 187-1927-7272
Email: gaol@hit.edu.cn
gaolin021@hotmail.com

EDUCATION AND WORKING

- **Harbin Institute of Technology (Shenzhen)** Shenzhen, China
 - *Associate Professor* in School of Electronic and Information Engineering Sept 2015 – Present
 - Research Topic: “Mobile Internet, Internet-of-Things, Network Economics, and Games”
- **The Chinese University of Hong Kong** Hong Kong
 - *Postdoc Fellow* in Department of Information Engineering Aug 2010 – Aug 2015
 - Research Topic: “Wireless Communications and Network Economics” (Advisor: Prof. [Jianwei Huang](#))
- **Shanghai Jiao Tong University** Shanghai, China
 - *Ph.D.* in Communication and Information System Sept 2006 – July 2010
 - Thesis: “Dynamic Spectrum Sharing in Cognitive Radio Networks: A Game-Theoretical Approach” (Supervisor: Prof. [Xinbing Wang](#) and Prof. [Youyun Xu](#))
 - *M.S.* in Communication and Information System Sept 2004 – Jan 2007
 - Thesis: “Research on Adaptive Resource Allocation for MIMO-OFDM Systems”
- **Nanjing University of Posts and Telecommunications** Nanjing, China
 - *B.E.* in Information Engineering Sept 1998 – June 2002

RESEARCH INTEREST

- **Wireless Communications and Networking**
 - Cognitive Radio Networking
 - TV White Space Networking
 - 5G Communications and Networking
 - Mobile Crowdsourcing and Internet-of-Things
- **Game Theory and Network Economics**
 - Network Game Modelling
 - Network Ecosystem Analysis
 - Sharing Economy and Crowdsourcing

SELECTED RESEARCH TOPICS

- **Dynamic Spectrum Sharing Network Ecosystem** 2007 - 2012
 - Secondary Spectrum Trading, Cooperative Spectrum Sharing, Integrated Spot and Futures Market
 - Research Outcome: **10+ journal papers** including Operations Research [19], JSAC [30, 31], TMC [18, 29, 32, 33], and **10+ conference papers** including SECON [81], DySPAN [82], MobiHoc [87]
 - Academia Impact: **1 ESI Highly Cited Paper [29]**
- **TV White Space Network Ecosystem** 2011 - 2015
 - TV White Space Trading Market, Information Trading Market, TV White Space Ecosystem
 - Research Outcome: **5+ journal papers** including JSAC [21, 22, 26], and **5+ conference papers** including INFOCOM [69], WiOpt [74]
 - Academia Impact: **1 Best Paper Award [74]**
- **Mobile Heterogeneous Network and Crowdsourcing** 2012 - Present
 - Mobile Data Offloading, User-Provided Network, Crowdsourced WiFi Network, Mobile Crowdsensing
 - Research Outcome: **10+ journal papers** including JSAC [25], TON [16, 17, 27], TMC [10, 11, 20], and **20+ conference papers** including INFOCOM [53, 54, 65, 68, 72, 73], WiOpt [61, 62, 70, 77]
 - Academia Impact: **2 Best (Student) Paper Awards [70, 77]**

RESEARCH AWARDS

- **IEEE ComSoc Asia-Pacific Outstanding Young Researcher Award** in 2016
- **Best Paper Award Finalist** in IEEE INFOCOM 2016
- **Best Student Paper Award** in WiOPT 2015
- **Best Paper Awards** in WiOPT 2013 and 2014
- **Best Team Player Awards** in Network Communications and Economics Lab (NCEL), CUHK, during 2012-2013, 2013-2014, and 2014-2015

WORKING EXPERIENCES

- **Huawei Technologies Co. Ltd.** Dec 2007 – July 2008
 - Visiting Researcher, in LTE Development Center, Shanghai, China
- **Lenovo Group Ltd.** Feb 2006 – Sept 2006
 - Spring-Summer Intern, in Communication Theory Center, Shanghai, China
- **China Mobile Communications Co. Ltd.** July 2002 – July 2004
 - Assistant Engineer, in Network Management Center, China Mobile Group Zhejiang Company, China

TEACHING EXPERIENCES

- **Guest Lecturer (in CUHK)** Sept 2013 – Dec 2013
 - Course: *Networks: Technology, Economics, and Social Interactions* (IERG 3280)
 - Department of Information Engineering, The Chinese University of Hong Kong, Shatin, Hong Kong
- **Guest Lecturer (in CUHK)** Jan 2011 – May 2011
 - Course: *Network Economics* (IERG 6280)
 - Department of Information Engineering, The Chinese University of Hong Kong, Shatin, Hong Kong
- **Teaching Assistant (in SJTU)** Sept 2006 – July 2009
 - Courses: *Mobile and Wireless Networks* (Graduate), *Computer Networks* (Undergraduate), *C++ Programming* (Undergraduate), *Web Development Technology* (Undergraduate), etc.
 - Departments of Electronic Engineering and Computer Science, Shanghai Jiao Tong University, China

PROFESSIONAL ACTIVITIES

- **Membership**
 - Senior Member, IEEE & IEEE Communications Society
- **Editorship**
 - Guest Editor, Journal of Mobile Information Systems (SCI, Impace Factor: 1.789)
- **Chairing**
 - Publicity & Social Media Chair of the 7th EAI International Conference on Game Theory for Networks (GameNets 2017), Tennessee, USA, May 2017
 - Publicity Chair of the 1st International Workshop on Green and Sustainable Networking and Computing (GSNC 2016), San Francisco, USA, April 2016
 - Publicity Chair of the 4th IEEE Workshop on Smart Data Pricing (SDP 2015), Hong Kong, April 2015
 - Symposium Chair (Pricing and Network Optimization Symposium) in the 5th EAI International Conference on Game Theory for Networks (GameNets 2014), Beijing, China, November 2014
- **Technical Program Committee (TPC) Members**
 - IEEE International Conference on Communications (ICC), 2012–2016
 - IEEE Global Communications Conference (GLOBECOM), 2013–2016
 - Asia-Pacific Conference on Communications (APCC), 2013–2016
 - International Conference on Connected Vehicles & Expo (ICCVE), 2012–2016
 - International Conference on Advanced Technologies for Communications (ATC), 2012–2016
 - International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt), 2013–2016
- **Technical Reviewers**
 - IEEE Journal on Selected Areas in Communications (JSAC)
 - IEEE Transactions on Mobile Computing (TMC)
 - IEEE/ACM Transactions on Networking (TON)
 - IEEE Transactions on Wireless Communications (TWC)
 - IEEE Transactions on Communications (TCOM)
 - IEEE Transactions on Vehicular Technology (TVT)
 - IEEE Communications Magazine
 - Conferences: ACM MobiHoc, IEEE INFOCOM, ICC, GLOBECOM, DySPAN, WCNC, WiOpt

Book

- [1] **Lin Gao**, L. Duan, S. Gong, and Q. Zhang, "Matching for Cooperative Spectrum Sharing", chapter in *Encyclopedia of Wireless Networks* (Editor-in-Chief: Sherman Shen), Springer, 2018
- [2] **Lin Gao**, X. Wang, Y. Xu, and Q. Zhang, "Contract-Based Secondary Spectrum Trading", chapter in *Handbook of Cognitive Radio: Cognitive Radio Resource Management* (Editor-in-Chief: Wei Zhang, Section Editors: Jianwei Huang and Xu Chen), Springer, 2017
- [3] Y. Luo, **Lin Gao**, and J. Huang, *Economics of Database-Assisted Spectrum Sharing*, Springer Briefs (Series Editor: Sherman Shen), Springer, 2016 (ISBN: 9783319432304, Page Number: 100)
- [4] J. Huang and **Lin Gao**, *Wireless Network Pricing*, Synthesis Lectures on Communication Networks (Series Editor: Jean Walrand), Morgan & Claypool Publishers, July 2013 (ISBN: 9781608459759, Page Number: 176)
- [5] Y. Xu, D. Li, W. Zhong, and **Lin Gao**, *Resource Management of Cognitive Radio Networks: Game Theoretic Modeling and Performance Analysis* (in Chinese), Publishing House of Electronics Industry, Beijing, China, October 2013 (ISBN: 9787121212420, Page Number: 256)

Journal

- [1] M. Tang, **Lin Gao**^(*), and J. Huang, "Enabling Edge Cooperation in Tactile Internet via 3C Resource Sharing," *IEEE Journal on Selected Areas in Communications (JSAC)*, 2018, forthcoming (IF:7.172) (* Corresponding Author)
- [2] Z. Wang, **Lin Gao**, and J. Huang, "Exploring Time Flexibility in Wireless Data Plans," *IEEE Transactions on Mobile Computing (TMC)*, 2018, forthcoming (IF:4.098)
- [3] J. Xu, Y. Zou, S. Gong, **Lin Gao**, D. Niyato, and W. Cheng, "Robust Transmissions in Wireless Powered Multi-Relay Networks with Channel Interference Constraints," *IEEE Transactions on Communications (TCOM)*, 2018, forthcoming (IF:4.671)
- [4] M. Tang, H. Pang, S. Wang, **Lin Gao**, J. Huang, and L. Sun, "Multi-Dimensional Auction Mechanisms for Crowdsourced Mobile Video Streaming," *IEEE/ACM Transactions on Networking (TON)*, 2018, forthcoming (IF:3.110)
- [5] Y. Wei, J. Yu, T. M. Lok, and **Lin Gao**^(*), "A Novel Mobile Data Contract Design with Time Flexibility," *IEEE Transactions on Mobile Computing (TMC)*, 2018, forthcoming (IF:4.098) (* Corresponding Author)
- [6] **Lin Gao**, M. Tang, H. Pang, J. Huang, and L. Sun, "Multi-User Cooperative Mobile Video Streaming: Performance Analysis and Online Mechanism Design," *IEEE Transactions on Mobile Computing (TMC)*, 2018, forthcoming (IF:4.098)
- [7] L. Sun, H. Pang, and **Lin Gao**, "Joint Sponsor Scheduling in Cellular and Edge Caching Networks for Mobile Video Delivery," *IEEE Transactions on Multimedia (TMM)*, 2018, forthcoming (IF:3.977)
- [8] Q. Ma, **Lin Gao**^(*), Y.F. Liu, and J. Huang, "Incentivizing Wi-Fi Network Crowdsourcing: A Contract Theoretic Approach," *IEEE/ACM Transactions on Networking (TON)*, vol.26, no.3, pp.1035-1048, April 2018 (IF:3.110) (* Corresponding Author)
- [9] D. Li, P. Deng, Y. Xu, **Lin Gao**, and G. Zhang, "Joint Access Spectrum and Backhaul Energy Allocation for Green Cognitive Heterogeneous Networks," *IEEE Access*, vol.6, pp.24793-24808, January 2018 (IF:3.557)
- [10] C. Jiang, **Lin Gao**, L. Duan, and J. Huang, "Data-Centric Mobile Crowdsensing," *IEEE Transactions on Mobile Computing (TMC)*, vol.17, no.6, pp.1275-1288, October 2017 (IF:4.098)
- [11] C. Jiang, **Lin Gao**, L. Duan, and J. Huang, "Scalable Mobile Crowdsensing via Peer-to-Peer Data Sharing," *IEEE Transactions on Mobile Computing (TMC)*, vol.17, no.4, pp.898-912, August 2017 (IF:4.098)
- [12] M. Tang, **Lin Gao**, H. Pang, J. Huang, and L. Sun, "Optimizations and Economics of Crowdsourced Mobile Streaming," *IEEE Communications Magazine*, vol.55, no.4, pp.21-27, April 2017 (IF:9.270)
- [13] X. Chen, L. Pu, **Lin Gao**^(*), W. Wu, and D. Wu, "Exploiting Massive D2D Collaboration for Energy-Efficient Mobile Edge Computing," *IEEE Wireless Communications*, vol.24, no.4, pp.64-71, August 2017 (IF:9.202) (* Corresponding Author)
- [14] H. Yu, M.H. Cheung, G. Iosifidis, **Lin Gao**, L. Tassiulas, and J. Huang, "Mobile Data Offloading for Green Wireless Networks," *IEEE Wireless Communications*, vol.24, no.4, pp.31-37, August 2017 (IF:9.202)

- [15] D. Li, H. Zhao, **Lin Gao**, and H. Zhu, "M2M Access With Dynamic Cognitive Virtual Operators: A Data Aggregator's Perspective," *IEEE Access*, vol.5, pp.5662-5677, April 2017 (IF:3.557)
- [16] H. Yu, M.H. Cheung, **Lin Gao**, and J. Huang, "Public Wi-Fi Monetization via Advertising," *IEEE/ACM Transactions on Networking (TON)*, vol.25, no.4, pp.2110-2121, March 2017 (IF:3.110)
- [17] G. Iosifidis, **Lin Gao**, J. Huang, and L. Tassiulas, "Efficient and Fair Collaborative Mobile Internet Access," *IEEE/ACM Transactions on Networking (TON)*, vol.25, no.3, pp.1386-1400, January 2017 (IF:3.110)
- [18] **Lin Gao**, L. Duan, and J. Huang, "Two-Sided Matching Based Cooperative Spectrum Sharing," *IEEE Transactions on Mobile Computing (TMC)*, vol.16, no.2, pp.538-551, February 2017 (IF:4.098) (**ESI Highly Cited Paper**)
- [19] **Lin Gao**, B. Shou, Y. Chen, and J. Huang, "Combining Spot and Futures Markets: A Hybrid Market Approach to Dynamic Spectrum Access," *Operations Research (OR)*, vol.64, no.4, pp.794 - 821, July 2016 (IF:2.263) (**A⁺ Journal in OR&MS**)
- [20] Q. Ma, **Lin Gao**^(*), Y.F. Liu, and J. Huang, "Economic Analysis of Crowdsourced Wireless Community Networks," *IEEE Transactions on Mobile Computing (TMC)*, vol.16, no.7, pp.1856-1869, September 2016 (IF:4.098) (* Corresponding Author)
- [21] Y. Luo, **Lin Gao**, and J. Huang, "An Integrated Spectrum and Information Market for Green Cognitive Communications," *IEEE Journal on Selected Areas in Communications (JSAC)*, vol.34, no.12, pp.3326-3338, December 2016 (IF:7.172)
- [22] Y. Luo, **Lin Gao**, and J. Huang, "MINE GOLD to Deliver Green Cognitive Communications," *IEEE Journal on Selected Areas in Communications (JSAC)*, vol.33, no.12, pp.2749-2760, December 2015 (IF:7.172)
- [23] Y. Luo, **Lin Gao**, and J. Huang, "Spectrum Reservation Contract Design in TV White Space Networks," *IEEE Transactions on Cognitive Communications and Networks (TCCN) (Invited Paper)*, vol.1, no.2, pp.147-160, November 2015
- [24] Y. Luo, **Lin Gao**, and J. Huang, "Business Modeling for TV White Space Networks," *IEEE Communications Magazine*, vol.53, no.5, pp.82-88, May 2015 (IF:9.270)
- [25] **Lin Gao**, G. Iosifidis, J. Huang, L. Tassiulas, and D. Li, "Bargaining-based Mobile Data Offloading," *IEEE Journal on Selected Areas in Communications (JSAC)*, vol.32, no.6, pp.1114-1125, June 2014 (IF:7.172)
- [26] Y. Luo, **Lin Gao**, and J. Huang, "Price and Inventory Competition in Oligopoly TV White Space Markets," *IEEE Journal on Selected Areas in Communications (JSAC)*, vol.33, no.5, pp.1002-1013, Oct 2014 (IF:7.172)
- [27] G. Iosifidis, **Lin Gao**, J. Huang, and L. Tassiulas, "A Double Auction Mechanism for Mobile Data Offloading Markets," *IEEE/ACM Transactions on Networking (TON)*, vol.23, no.5, pp.1634-1647, Sept 2014 (IF:3.110)
- [28] G. Iosifidis, **Lin Gao**, J. Huang, and L. Tassiulas, "Incentive Mechanisms for User-Provided Networks," *IEEE Communications Magazine*, vol.52, no.9, pp.20-27, September 2014 (IF:9.270)
- [29] L. Duan, **Lin Gao**, and J. Huang, "Cooperative Spectrum Sharing: A Contract-Based Approach," *IEEE Transactions on Mobile Computing (TMC)*, vol.13, no.1, pp.174-187, January 2014 (IF:4.098) (**ESI Highly Cited Paper**)
- [30] **Lin Gao**, J. Huang, Y. Chen, and B. Shou, "An Integrated Contract and Auction Design for Secondary Spectrum Trading," *IEEE Journal on Selected Areas in Communications (JSAC)*, vol.31, no.3, pp.581-592, March 2013 (IF:7.172)
- [31] **Lin Gao**, X. Wang, Y. Xu, and Q. Zhang, "Spectrum Trading in Cognitive Radio Networks: A Contract-Theoretic Modeling Approach," *IEEE Journal on Selected Areas in Communications (JSAC)*, vol.29, no.4, pp.843-855, April 2011 (IF:7.172)
- [32] **Lin Gao**, Y. Xu, and X. Wang, "MAP: Multi-Auctioneer Progressive Auction for Dynamic Spectrum Access," *IEEE Transactions on Mobile Computing (TMC)*, vol.10, no.8, pp.1144-1161, November 2011 (IF:4.098)
- [33] **Lin Gao**, X. Wang, and Y. Xu, "Multiradio Channel Allocation in Multihop Wireless Networks," *IEEE Transactions on Mobile Computing (TMC)*, vol.8, no.11, pp.1454-1468, May 2009 (IF:4.098)
- [34] L. Qian, F. Ye, **Lin Gao**, X. Gan, T. Chu, X. Tian, X. Wang, and M. Guizani, "Spectrum Trading in Cognitive Radio Networks: An Agent-Based Model under Demand Uncertainty," *IEEE Transactions on Communications (TCOM)*, vol.59, no.11, pp.3192-3203, October 2011 (IF:4.671)
- [35] H. Yu, **Lin Gao**, Z. Li, X. Wang, and E. Hossain, "Pricing for Uplink Power Control in Cognitive Radio Networks," *IEEE Transactions on Vehicular Technology (TVT)*, vol.59, no.4, pp.1769-1778, Jan 2010 (IF:4.432)

Conference

- [36] Z. Wang, **Lin Gao**, J. Huang, and B. Shou, "Economic Viability of Data Trading with Rollover," *IEEE International Conference on Computer Communications (INFOCOM)*, Paris, France, May 2019
- [37] W. Chen, C. Li, S. Gong, **Lin Gao**, and J. Xu, "Joint Transmission Scheduling and Power Allocation in Wirelessly Powered Hybrid Radio Networks," *International Conference on Computing, Networking and Communications (ICNC)*, Honolulu, Hawaii, USA, February 2019
- [38] Y. Zhong, **Lin Gao**^(*), T. Wang, S. Gong, B. Zou, and D. Yu, "Achieving Stable and Optimal Passenger-Driver Matching in Ride-Sharing System," *IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS)*, Chengdu, China, October 2018 (* Corresponding Author)
- [39] F. Long, T. Wang, T. Ma, **Lin Gao**, Y. Jiang, and L. Chang, "Set-Membership Conjugate Gradient Channel Estimation for Wireless Sensor Networks," *International Conference on Wireless Communications and Signal Processing (WCSP)*, Hangzhou, China, October 2018
- [40] Z. Wang, **Lin Gao**, and J. Huang, "Multi-Dimensional Contract Design for Mobile Data Plan with Time Flexibility," *ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc)*, Los Angeles, USA, June 2018
- [41] H. Pang, **Lin Gao**, Q. Ding, J. Liu, and L. Sun., "Competitive Analysis of Data Sponsoring and Edge Caching for Mobile Video Streaming," *ACM SIGMM Workshop on Network and Operating Systems Support for Digital Audio and Video (NOSSDAV)* (co-located with ACM MMSys), Amsterdam, Netherlands, June 2018
- [42] X. Zeng, **Lin Gao**^(*), C. Jiang, T. Wang, J. Liu, and B. Zou, "A Hybrid Pricing Mechanism for Data Sharing in P2P-based Mobile Crowdsensing," *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Shanghai, China, May 2018 (* Corresponding Author)
- [43] J. Liu, **Lin Gao**^(*), T. Wang, X. Zeng, W. Lu, Y. Zhong, "Crowdsourcing: A Novel Approach to Organizing WiFi Community Networks," *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Shanghai, China, May 2018 (* Corresponding Author)
- [44] Z. Wang, **Lin Gao**, and J. Huang, "Duopoly Competition for Mobile Data Plans with Time Flexibility," *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Shanghai, China, May 2018
- [45] S. Gong, J. Xu, **Lin Gao**, X. Huang, and W. Liu, "Passive Relaying Scheme via Backscatter Communications in Cooperative Wireless Networks," *IEEE Wireless Communications and Networking Conference (WCNC)*, Barcelona, Spain, April 2018
- [46] **Lin Gao** and J. Huang, "Achieving an Efficient and Fair Equilibrium Through Taxation," *Asia-Pacific Conference on Communications (APCC) (Invited Paper)*, Perth, Australia, December 2017
- [47] M. Tang, **Lin Gao**, and J. Huang, "A General Framework for Crowdsourcing Mobile Communication, Computation, and Caching," *IEEE Global Communications Conference (GLOBECOM)*, Singapore, December 2017
- [48] H. Pang, **Lin Gao**, Q. Ding, and L. Sun, "When Data Sponsoring Meets Edge Caching: A Game-Theoretic Analysis," *IEEE Global Communications Conference (GLOBECOM)*, Singapore, December 2017
- [49] X. Mo, Z. Li, **Lin Gao**^(*), B. Cao, T. Zhang, and T. Wang, "User-Centric Participatory Sensing: A Game Theoretic Analysis," *IEEE Global Communications Conference (GLOBECOM)*, Singapore, December 2017 (* Corresponding Author)
- [50] X. Zhang, **Lin Gao**^(*), B. Cao, Z. Li, and M. Wang, "A Double Auction Mechanism for Mobile Crowd Sensing with Data Reuse," *IEEE Global Communications Conference (GLOBECOM)*, Singapore, December 2017 (* Corresponding Author)
- [51] C. Lou, B. Cao, **Lin Gao**, L. Sun, and Q. Zhang, "MOSTPC: Performance of A Massive Oblique Space-TimePolarization Precoding System over Ricean-K Fading Channel," *IEEE Vehicular Technology Conference (VTC)*, Toronto, Canada, September 2017
- [52] Z. Wang, **Lin Gao**, and J. Huang, "A Contract-Theoretic Design of Mobile Data Plan with Time Flexibility," *ACM Workshop on the Economics of Networks, Systems and Computation (NetEcon)* (in conjunction with ACM EC), MIT, Cambridge, MA, USA, June 2017
- [53] M. Zhang, **Lin Gao**, J. Huang, and M. Honig, "Cooperative and Competitive Operator Pricing for Mobile Crowdsourced Internet Access," *IEEE International Conference on Computer Communications (INFOCOM)*, Atlanta, GA, USA, May 2017

- [54] M. Tang, S. Wang, **Lin Gao**, J. Huang, and L. Sun, "MOMD: A Multi-Object Multi-Dimensional Auction for Crowdsourced Mobile Video Streaming," *IEEE International Conference on Computer Communications (INFOCOM)*, Atlanta, GA, USA, May 2017
- [55] Z. Wang, **Lin Gao**, and J. Huang, "Pricing Optimization of Rollover Data Plan," *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Paris, France, May 2017
- [56] Y. Gao, X. Zhang, X. Mo, and **Lin Gao**^(*), "An Evolutionary Game Theoretic Analysis for Crowdsourced WiFi Networks," *IEEE International Conference on Communications (ICC)*, Paris, France, May 2017
(* Corresponding Author)
- [57] C. Jiang, **Lin Gao**, L. Duan, and J. Huang, "Exploiting Data Reuse in Mobile Crowdsensing," *IEEE Global Communications Conference (GLOBECOM)*, Washington, DC, USA, December 2016
- [58] H. Pang, **Lin Gao**, L. Sun, "Joint Optimization of Data Sponsoring and Edge Caching for Mobile Video Delivery," *IEEE Global Communications Conference (GLOBECOM)*, Washington, DC, USA, December 2016
- [59] Y. Wei, J. Yu, T.M. Lok, and **Lin Gao**^(*), "A Novel Mobile Data Plan Design from the Perspective of Data Period," *IEEE International Conference on Communication Systems (ICCS)*, Shenzhen, China, December 2016
(* Corresponding Author)
- [60] S. Zuo, **Lin Gao**, H. Xu, and T. Zhang, "Power Allocation Game for Wireless Network Localization," *IEEE International Conference on Ubiquitous Wireless Broadband (ICUWB) (Invited Paper)*, Nanjing, China, October 2016
- [61] Q. Ma, **Lin Gao**, Y.F. Liu, and J. Huang, "A Contract-Based Incentive Mechanism for Crowdsourced Wireless Community Networks," *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Arizona, USA, May 2016
- [62] M. Tang, **Lin Gao**, H. Pang, J. Huang, and L. Sun, "A Multi-Dimensional Auction Mechanism for Mobile Crowdsourced Video Streaming," *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Arizona, USA, May 2016
- [63] **Lin Gao**, M. Tang, H. Pang, J. Huang, and L. Sun, "Performance Bound Analysis for Crowdsourced Mobile Video Streaming," *Conference on Information Sciences and Systems (CISS) (Invited Paper)*, Princeton, NJ, USA, March 2016
- [64] H. Pang, P. Wang, **Lin Gao**, M. Tang, J. Huang, and L. Sun, "Crowdsourced Mobility Prediction Based on Spatio-Temporal Contexts," *IEEE International Conference on Communications (ICC)*, Malaysia, May 2016
- [65] H. Yu, M. Cheung, **Lin Gao**, and J. Huang, "Economics of Public Wi-Fi Monetization and Advertising," *IEEE International Conference on Computer Communications (INFOCOM)*, San Francisco, USA, April 2016
(**Best Paper Award Finalist**, Ranking top 5 among 300 accepted papers in INFOCOM 2016)
- [66] Z. Zheng, **Lin Gao**, L. Song, and J. Huang, "Topology-Aware Incentive Mechanism for Cooperative Relay Networks," *IEEE Global Communications Conference (GLOBECOM)*, San Diego, USA, December 2015
- [67] C. Jiang, **Lin Gao**, L. Duan, and J. Huang, "Economics of Peer-to-Peer Mobile Crowdsensing," *IEEE Global Communications Conference (GLOBECOM)*, San Diego, USA, December 2015
- [68] **Lin Gao**, F. Hou, and J. Huang, "Providing Long-Term Participation Incentive in Participatory Sensing," *IEEE International Conference on Computer Communications (INFOCOM)*, Hong Kong, May 2015
- [69] Y. Luo, **Lin Gao**, and J. Huang, "HySIM: A Hybrid Spectrum and Information Market for TV White Space Networks," *IEEE International Conference on Computer Communications (INFOCOM)*, Hong Kong, May 2015
- [70] Q. Ma, **Lin Gao**, Y.F. Liu, and J. Huang, "A Game-Theoretic Analysis of User Behaviors in Crowdsourced Wireless Community Networks," *International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks (WiOpt)*, Indian, May 2015 (**Best Student Paper Award**)
- [71] M.M. Khalili, **Lin Gao**, J. Huang, and B. H. Khalaj, "Incentive Design and Market Evolution of Mobile User-Provided Networks," *IEEE Workshop on Smart Data Pricing (SDP) (Invited Paper)*, Hong Kong, May 2015
- [72] **Lin Gao**, G. Iosifidis, J. Huang, and L. Tassiulas, "Hybrid Data Pricing for Network-Assisted User-Provided Connectivity," *IEEE International Conference on Computer Communications (INFOCOM)*, Toronto, Canada, April 2014
- [73] G. Iosifidis, **Lin Gao**, J. Huang, and L. Tassiulas, "Enabling Crowd-Sourced Mobile Internet Access," *IEEE International Conference on Computer Communications (INFOCOM)*, Toronto, Canada, April 2014

- [74] Y. Luo, **Lin Gao**, and J. Huang, "Trade Information, Not Spectrum: A Novel TV White Space Information Market Model," *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Hammamet, Tunisia, May 2014 (**Best Paper Award**)
- [75] Y. Luo, **Lin Gao**, and J. Huang, "Information Market for TV White Space," *IEEE Workshop on Smart Data Pricing (SDP) (Invited Paper)*, Toronto, Canada, May 2014
- [76] Y. Luo, **Lin Gao**, and J. Huang, "White Space Ecosystem: A Secondary Network Operator's Perspective," *IEEE Global Communications Conference (GLOBECOM)*, Atlanta, USA, December 2013
- [77] G. Iosifidis, **Lin Gao**, J. Huang, and L. Tassiulas, "An Iterative Double Auction for Mobile Data Offloading," *International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt)*, Tsukuba Science City, Japan, May 2013 (**Best Paper Award**)
- [78] **Lin Gao**, G. Iosifidis, J. Huang, and L. Tassiulas, "Economics of Mobile Data Offloading," *IEEE Workshop on Smart Data Pricing (SDP) (Invited Paper)* (co-located with IEEE INFOCOM), Turin, Italy, April 2013
- [79] Y. Luo, **Lin Gao**, and J. Huang, "Spectrum Broker by Geo-location Database," *IEEE Global Communications Conference (GLOBECOM)*, Anaheim, USA, December 2012
- [80] **Lin Gao**, J. Huang, Y. Chen, and B. Shou, "ContrAuction: An Integrated Contract and Auction Design for Dynamic Spectrum Sharing," *Conference on Information Sciences and Systems (CISS) (Invited Paper)*, Princeton, NJ, USA, March 2012
- [81] **Lin Gao**, X. Wang, G. Sun and Y. Xu, "A Game Approach for Cell Selection and Resource Allocation in Heterogeneous Wireless Networks," *IEEE Communications Society Conference on Sensor, Mesh and Ad Hoc Communications and Networks (SECON)*, Utah, USA, June 2011
- [82] L. Duan, **Lin Gao**, and J. Huang, "Contract-Based Cooperative Spectrum Sharing," *IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (DySPAN)*, Aachen, Germany, May 2011
- [83] H. Wang, **Lin Gao**, X. Gan, X. Wang, and E. Hossain, "Cooperative Spectrum Sharing in Cognitive Radio Networks: A Game-Theoretic Approach," *IEEE International Conference on Communications (ICC)*, South Africa, May 2010
- [84] T. Chu, P. Cheng, **Lin Gao**, X. Wang, et al., "Spectrum Trading in Cognitive Radio Network: An Agent-based Model under Demand Uncertainty," *IEEE Global Communications Conference (GLOBECOM)*, Miami, USA, December 2010
- [85] P. Xu, S. Gu, **Lin Gao**, H. Yu, et al., "Myopic Sensing for Multiple SUs in Multichannel Opportunistic Access," *International Wireless Communications and Mobile Computing Conference (IWCMC)*, Caen, France, June 2010
- [86] H. Yu, **Lin Gao**, Y. Li, X. Gan, et al., "Information Sharing in Spectrum Auction for Dynamic Spectrum Access," *IEEE Global Communications Conference (GLOBECOM)*, Hawaii, USA, December 2009
- [87] **Lin Gao** and X. Wang, "A Game Approach for Multi-Channel Allocation in Multi-Hop Wireless Networks," *ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc)*, Hong Kong, May 2008
- [88] **Lin Gao**, X. Wang, Y. Xu, and W. Chen, "Distributed Multi-radio Channel Allocation in Multi-Hop Ad Hoc Networks," *IEEE International Conference on Communications (ICC)*, Beijing, China, May 2008