

Dr. Zhu Han

CONTACT INFORMATION

W302 Engineering Building 2
University of Houston
Houston, TX 77004, USA

Phone: (713) 743-4437 (o), (301) 996-2011 (c)
E-mail: hanzhu22@gmail.com, zhan2@uh.edu
<http://www2.egr.uh.edu/~zhan2/>

HIGHLIGHT

24 graduated Ph.D. (include 7 females and 1 African American) and graduated 4 M.S., 4 former postdoc, and currently 14 Ph.D. students and 1 postdoc

2021 IEEE Kiyo Tomiyasu Award, for outstanding early to mid-career contributions to technologies holding the promise of innovative applications, with the following citation: “For contributions to game theory and distributed management of autonomous communication networks.”

2020 AAAS Fellow for distinguished contributions to the field of game theory, particularly for modeling, analysis and algorithm design of new applications in communication networks

ACM Distinguished Member since 2019

IEEE Distinguished Lecturer, 2015-2018

2016 IEEE Leonard G. Abraham Prize in the field of Communications Systems (Best Paper Award for IEEE Journal on Selected Areas on Communications)

2015 EURASIP Best Paper Award for Journal on Advances in Signal Processing

2014 IEEE Fellow for contributions to resource allocation and security in wireless communications

2011 IEEE Communications Society Fred W. Ellersick Prize (Best Paper Award for IEEE Wireless Communications Magazine)

17 National Science Foundation and 1 MURI Awards

15 conference best paper awards

Award for Excellence in Research, Scholarship or Creative Activity, Twice, 2010–2011, 2014-2015, the highest in University, 2 winners per year

11 textbooks/1 edited book, all by Cambridge University Press

624 published/accepted transactions/magazines/letters, more than 500 conference papers, 14 research monograph books, 21 book chapters, and 2 patents

Web of Science top 1% Highly Cited Researcher in Computer Science Category since 2017

Google Scholar Citation >50,000 and **H index** 111 (ranking within top 150 researchers of Computer Science & Electronics worldwide)

EDUCATION

University of Maryland, College Park, Maryland, USA
Ph.D. in Electrical and Computer Engineering, November, 2003
M.S. in Electrical and Computer Engineering, May, 1999

Tsinghua University, Beijing, China
B.S. in Electronic Engineering, June, 1997
Major: Communication, Minor: English
Rank No. 7 in Tsinghua New Student Exam 1992

ACADEMIA
EMPLOYMENT

University of Houston, Houston, Texas, USA
John and Rebecca Moores Professor **April, 2018 - Present**
Full Professor in ECE Department **September, 2015 - April 2018**
Joint Appointment with CS Department
Director of Computer & Systems Engineering Program
Associate Professor in ECE Department **August, 2012 - August, 2015**
Assistant Professor in ECE Department **August, 2008 - August, 2012**

Boise State University, Boise, Idaho, USA
Assistant Professor in ECE Department **August, 2006 - May, 2008**

University of Maryland, College Park, Maryland, USA
Faculty Research Associate **November, 2003 - June, 2006**
Faculty Research Assistant **November, 2002 - November, 2003**
 Advisor: Professor K. J. Ray Liu.

University of Maryland, College Park, Maryland, USA
Graduate Research Assistant **August, 1997 - June, 2000**

INDUSTRY
EMPLOYMENT

JDS Uniphase Corporation (JDSU), Germantown, Maryland, USA
Electrical Engineer **July, 2000 - November, 2002**

Hughes Network Systems, Germantown, Maryland, USA
Summer Intern **May 1998 - August, 1998**

National Meteorology Center, Beijing, China
Summer Intern **June, 1996 - July, 1997**

GRANT

Multidisciplinary University Research Initiative (MURI), CO-Principal Investigator of “Advanced Mean-Field Game Theory for Complex Physical & Soci-Economical Systems,” collaborative with University of California at Los Angeles, Princeton University, and University of Maryland at College Park, Air Force Office of Scientific Research (AFOSR), 18RT0073, \$1,200,000 out of \$7,500,000, 2018-2023.

National Science Foundation Projects

1. **Principal Investigator** of “Collaborative Research: SWIFT: Nonlinear and Inseparable Radar And Data (NIRAD) Transmission Framework for Pareto Efficient Spectrum Access in Future Wireless Networks,” collaborative with University of Tennessee and the Princeton University, National Science Foundation, \$249,999, out of \$750,000, Nets-2107216, 2021-2024.
2. **Principal Investigator** of “Collaborative Research: CNS Core: Medium: Exploiting New Degrees-of-Freedom in Wireless Networks with Reprogrammable Intelligent Metagratings,” collaborative with University of California at Irvine and the City University of New York, National Science Foundation, \$399,997, out of \$1,200,000, Nets-2107216, 2021-2024.

3. **Principal Investigator** of “NeTS: Small: Collaborative Research: Hierarchical Framework with Distributed Resource Allocation for Mobile Fog Computing,” collaborative with University of North Carolina at Charlotte, National Science Foundation, \$249,999, out of \$500,000, CNS-1717454, 2017-2020.
4. **Principal Investigator** of “Collaborative Research: Energy-Efficient Heterogeneous Network Virtualization with Spectrum-Power Trading,” collaborative with Georgia Tech., National Science Foundation, \$200,000, out of \$500,000, CNS-1731424, 2017-2020.
5. **CO-Principal Investigator** of “WiFiUS: Collaborative Research: Ambient Re-Scatter Inspired Machine Type Communication for Heterogeneous IoT Systems,” collaborative with Aalto University, Finland, National Science Foundation, \$150,000, out of \$300,000, CNS-1702850, 2017-2019
6. **CO-Principal Investigator** of “CPS: Synergy: Collaborative Research: DEUS: Distributed, Efficient, Ubiquitous and Secure Data Delivery Using Autonomous Underwater Vehicles,” collaborative with Missouri University of Science and Technology, National Science Foundation, \$150,000, out of \$600,000, CNS-1646607, 2016-2019.
7. **Principal Investigator** of “EARS: Collaborative Research: Full-Duplex Cognitive Radio: A New Design Paradigm for Enhancing Spectrum Usage,” collaborative with Rice University, National Science Foundation, \$200,000, out of \$400,000, ECCS-1547201, %100 credit, 2015-2018. INTERN Supplementary Funding, \$28,205, 2018.
8. **Principal Investigator** of “Collaborative Research: WiFiUS: Heterogeneous Resource Allocation for Hierarchical Software-Defined Radio Access Networks at the Edge,” collaborative with Arizona State University, University of Oulu, VTT Finland, National Science Foundation, \$140,000, CCF-1456921, 2015-2017.
9. **Principal Investigator** of “Collaborative Research: Proactive Recovery of Electric Power Assets for Resiliency Enhancement (PREPARE)”, collaborative with University of Denver, National Science Foundation, CMMI-1434789, funded, \$249,999 out of a total of \$500,000, 2014-2017.
10. **Principal Investigator** of “EARS: Collaborative Research: Laying the Foundations of Social Network-Aware Cellular Device-to-Device Communications”, collaborative with University of Florida and Virginia Tech., National Science Foundation, CNS-1443917, funded, \$234,001 out of a total of \$680,000, 2015-2017.
11. **Principal Investigator** of “Collaborative Research: CCSS: D2D Wireless Networks: An Interference Nightmare or Resource Allocation Auspice,” collaborative with Georgia Tech, , National Science Foundation, ECCS-1405121, funded, \$185,000 out of a total of \$370,000, 2014-2017.
12. **Principal Investigator** of “EAGER: Collaborative Research: Joint Adaptation of Multiple Cognitive Systems without Explicit Coordination”, collaborative with Virginia Tech., National Science Foundation, CNS-1265268, funded, \$150,000 out of a total of \$500,000, 2013-2015.
13. **Principal Investigator** of “NeTS:Small:Toward Wireless Co-existence For Safety-critical Applications”, National Science Foundation, CNS-1117560, funded, \$300,000

out of a total of \$500,000, 2011-2014 (Co-PI at submission. Change to PI since original PI left).

14. **Principal Investigator** of “IHCS: Collaborative Research: Compressive Spectrum Sensing in Cognitive Radio Networks,” collaborative with Rice University, National Science Foundation, ECCS-1028782, funded, \$256,000 out of a total of \$500,000, 2010-2014.
15. **Principal Investigator** of “CAREER: Mutual Benefit in Cognitive Radio Networks: A Coalitional Game Framework,” Career Award, National Science Foundation, CNS-0953377, funded, \$416,000, 2010-2015.
16. **Principal Investigator** of “NeTS: Medium: Collaborative Research: Cooperative Beamforming for Efficient and Secure Wireless Communication,” collaborative with Drexel University, Princeton University, and Colorado School of Mines, National Science Foundation, CNS-0905556, NeTS, funded, \$150,000 out of a total of \$675,000, 2009-2012.
17. **Principal Investigator** of “Collaborative Research: Trusted Cooperative Transmission: Turning a Security Weakness into a Security Enhancement,” collaborative with the University of Rhode Island, National Science Foundation, CNS-0910461, Cyber Trust, funded, \$108,000 out of a total of \$216,000, 2008-2011.

Other Federal Projects

17. **Co-Principal Investigator** of “Distributed chemical sensing for sub-surface oil spill sensing”, U.S. Department of Interior - Minerals Management, funded, \$89,670 out of a total of \$896,700, 2014-2015.
18. **Co-Principal Investigator** of “Novel Sensor System for the Early Detection and Monitoring of Offshore Oil Spills”, Gulf of Mexico Research Initiative RFP-II, funded, GoMRI-030, \$112,500 out of a total of \$750,000, 2012-2015.
19. **Co-Principal Investigator** of “Reconfigurable Electronics and Non-Volatile Memory Research,” Air Force Office of Scientific Research, FA9453-8-2-0252, funded, \$100,000 out of a total of \$2,500,000, 2008-2010.

Industrial Projects

20. **Principal Investigator** of “Distributed Learning-assisted Scalable Data Transfer and Offloading for Connected Vehicles in Mobile Edge Computing,” gift, Toyota, 2021, \$60,000.
21. **Principal Investigator** of “Big Data Optimization and Machine Learning for Connected Vehicles with Edge Computing for 5G, 6G, and Beyond,” gift, Toyota, 2020, \$70,000.
22. **Principal Investigator** of “Low-cost Learning-assisted Resource Management for Connected Vehicles based on Mobile Edge/Fog Computing,” gift, Toyota, 2019, \$30,000.
23. **Principal Investigator** of “Data Analysis and Resource Management for Mobile Edge Computing,” gift, Toyota, 2018, \$50,000.
24. **Principal Investigator** of “Hierarchical Architectural Design Alternatives based on Edge Computing for Connected Vehicles,” gift, Toyota, 2017, \$30,000.

25. **Principal Investigator** of “Deep Learning For Image Analytics In Energy Industry,” Chevron, 2017-2018, \$50,000.
26. **Co-Principal Investigator** of “Deep Transfer Learning Enabled Machine Vision Inspection and Its Applications in Exploration Geophysics,” Advanced Geophysical Technology Inc. 2017-2018, based on SBIR 1746824, \$45,000.
27. **Co-Principal Investigator** of “Video Analytics for Quantifying the Cuttings at Shale Shaker,” Shell, 2017-2018, \$50,000.
28. **Founder** of Electric Power Analytics Consortium, 2012. Current members: Centerpoint and Direct Energy, \$200,000.
29. **Principal Investigator** of “Teaching and Research Proposal for Texas Instrument Digital Signal Processor,” Texas Instruments and Micron Technology, funded, \$151,580, 2007.

Other Projects

27. **CO-Principal Investigator** of “Reconstructing high-resolution infrared spectroscopic images from high-speed multimodal microscopes,” CACDS: Seed Funding For Advanced Computing, University of Houston, \$40,000, 2017-2018.
28. **Principal Investigator** of “A Context Aware Framework for Optimized Resource Management in Fourth Generation Wireless Systems,” collaborative with American University of Beirut and Nanyang Technological University, Qatar National Research Fund, NPRP 4 - 347 - 2 - 127, funded, \$125,000 out of a total of \$400,000, 2012-2015.
29. **New Faculty Award**, \$6,000, University of Houston, Houston, Texas, 2008.

Participants (Senior Personnel) of European Projects

31. “Rate Allocation for Satellite Systems with Correlated Channels Based on a Stackelberg Game,” funded, European Space Agency PRESTIGE Programme, 2009-2012.
32. “Theoretical Foundations of Mobile Flexible Networks,” VERDIKT project supported by Research Council of Norway, 2007-2010.
33. “Optimized Heterogeneous Multiuser MIMO Networks - OptiMO,” VERDIKT project supported by Research Council of Norway, 2008-2011.
34. “Mobile-to-Mobile Communication Systems - M2M,” VERDIKT project supported by Research Council of Norway, 2009-2012.

HONORS FOR RESEARCH

IEEE Kiyo Tomiyasu Award 2021, for outstanding early to mid-career contributions to technologies holding the promise of innovative applications, with the following citation: “For contributions to game theory and distributed management of autonomous communication networks.”

AAAS Fellow in 2019 (class of 2020) for distinguished contributions to the field of game theory, particularly for modeling, analysis and algorithm design of new applications in communication networks.

ACM Distinguished Member since 2019.

IEEE Fellow in 2013 (class of 2014) for contributions to resource allocation and security in wireless communications

Best Paper Award, AMA Winter Academic Conference, 2020

Best Paper Award, IEEE International Conference on Communications, Shanghai, China 2019.

WCSP 10-Year Anniversary Excellent Paper Award, International Conference on Wireless Communications and Signal Processing, 2019.

Best Conference Paper, IEEE Technical Committee on Green Communications & Computing, 2019

IEEE Distinguished Lecturer, 2015-2018.

Best Journal Paper, IEEE Technical Committee on Green Communications & Computing, 2018

Best Paper Award, IEEE Globecom, Singapore, 2017

Best Paper Award, IEEE International Conference on Communications in China, Qingdao, China, 2017.

Best Paper Award 2016, IEEE Journal on Selected Areas on Communications (IEEE Leonard G. Abraham Prize in the field of Communications Systems).

Best Paper Award, IEEE International Conference on Communications, Kuala Lumpur, Malaysia, 2016.

Best Paper Award, IEEE International Conference on Communication Systems, Shengzhen, China, 2016.

Best Paper Award 2015 EURASIP Best Paper Award for the Journal on Advances in Signal Processing.

Best Paper Award, IEEE International Conference on Communications, London, UK, 2015.

Best Paper Award, IEEE Globe Communication Conference, Austin, Texas, 2014.

Best Paper Award, IEEE Wireless Communication and Networking Conference, Shanghai, China, 2013.

Best Paper Award, IEEE International Conference on Smart Grid Communications, Tainan, Taiwan, China, 2012.

Best Paper Award, International Conference on Wireless Communications and Signal

Processing (WCSP), Huangshang, China, 2012.

Best Paper Award, Two in IEEE Wireless Communication and Networking Conference, Paris, France, 2012.

The 2011 IEEE Communications Society Fred W. Ellersick Prize, IEEE Wireless Communications Magazine Best Paper Award.

Award for Excellence in Research & Scholarship, the highest level (2 awardees per year) in University of Houston, 2011 and 2015.

NSF Career Award, 2010.

Best Paper Award, IEEE International Conference on Communications, Dresden, Germany, 2009.

Best Paper Award, 7th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, (WiOpt09), South Korea, 2009.

VISITING
EXPERIENCE

Beijing University, Beijing China

Tsinghua University, Beijing China

Visiting Professor

August, 2013

Hongkong RGC visitor program, Hong Kong

International Visiting Professor

August, 2012

Kyung Hee University, South Korea

International Scholar

June-July, 2011, January 2012

Host: Professor Ju Bin Song.

Visiting Korean University, Seoul National University, Sungkyunkwan University, KAIST, Gwangju Institute of Science and Technology, National Taiwan University, National Chiao Tung University, Tsinghua University, Shanghai Jiaotong University, Chinese University of Hongkong, Hong Kong University of Science and Technology, Hong Kong Polytech. Nanyang Technology Singapore, and National University of Singapore.

Inria, France

Visiting Professor

June, 2010

Host: Professor Eitan Altman

University of Illinois, Urbana-Champaign, USA

Visiting Professor

July, 2009

Host: Professor Tamer Basar

University of Oslo, Oslo, Norway; **Supelec**, Paris, France

Visiting Professor

May, 2008 - July, 2008

Host: Professor Are Hjørungnes and Professor Mérouane Debbah

Stanford University, Stanford, California, USA

Visiting Professor

May, 2007 - August, 2007

Host: Professor John M. Cioffi

Princeton University, Princeton, New Jersey, USA

Visiting Scholar

July, 2006 - August, 2006

Host: Professor H. Vincent Poor

TEACHING
EXPERIENCE

University of Houston, Houston, USA

ECE6397 Selective Topics in Optimization

Fall, 2012

ECE6333 Detection and Estimation

Spring, 2011, 2013, 2015

ECE6332 Wireless Communication

Spring, 2010, 2014, 2016, 2017, 2018

ECE6331 Advanced Telecommunications

Spring, 2009

ECE4371 Introduction to Telecommunication Engineering

ECE4117 Telecommunication Laboratory

Fall, 2008-Fall, 2018

ECE 6331/5397 Advanced Telecommunication

ECE5197 Advanced Telecommunication Laboratory

Fall, 2019

ECE6397 Selective Topics in Big Data

Spring, 2020

Boise State University, Boise, Idaho, USA

EE 552/452: Wireless Communications and Networks

Spring, 2007-2008

EE 554/454: Digital Signal Processing

Fall, 2007

EE 551/451: Communication Systems

Fall, 2006-2007

University of Maryland, College Park, Maryland, USA

Guest Lecturer, Undergraduate ENES100

Fall, 2004; Fall, 2005

Beijing University, China, summer 2019

Beijing University of Posts and Telecommunications, China, summer 2018

Signal Processing and Networking for Big Data Applications

http://www2.egr.uh.edu/~zhan2/big_data_course/

National Chiao Tun University, Taiwan, three visits, 2019

Kyung Hee University, South Korea, summer 2017

Game Theory in Wireless and Communication Networks: Theory, Models, and Applications

http://www2.egr.uh.edu/~zhan2/game_theory_course/

CURRENT GROUP
MEMBER

1. Daniel Doe, Ph.D. Student
2. Meiyong Zhang, Ph.D. Student
3. Dawei Chen, Ph.D. student
4. Hao Gao, Ph.D. student
5. Jing Li, Ph.D. student
6. Wen Xie, Ph.D. student
7. Yuhan Kang, Ph.D. student
8. Nguyen Tran, Ph.D. student, joint with Dr. David Mayerich
9. Kai-Chu Tsai, Ph.D. student, joint with Dr. Ricardo, Lent
10. Eyad Shtaiwi, Ph.D. student, joint with Dr. Ahmed Abdelhadi
11. Yuan Zi, Ph.D. student, joint with Dr. Jiefu Chen
12. Mingze Li, Ph.D. student, joint with Dr. Lei Fan
13. Zhongqi Zhao, Ph.D. student, joint with Dr. Lei Fan
14. Wenlu Xuan, Ph.D. student, joint with Dr. Lei Fan
15. Dr. Hongliang Zhang, Postdoc

ALUMNI

1. Mohamed Elmoossalamy, Ph.D. 2020, "Passive Reflection Techniques for Wireless Communications"
2. Xunsheng Du, Ph.D. 2020, "Applied Machine Learning with Latent Space Representation and Manipulation"
3. Saeed Ahmadian, Ph.D. 2020, "Detecting Cyber-attacks to Smart Grids and Increasing Resiliency using Data Driving Algorithms," joint with Dr. Heidar Malki
4. Kuo Chun (Kevin) Tsai, Ph.D. 2020, "Link Game Theory and Machine Learning in Theories and Applications"
5. Reginald Banez, Ph.D. 2020, Mean Field Game Theory for Future Heterogeneous and Hierarchical Communication Networks
6. Neetu Raveendran, Ph.D. 2019, "Game Theoretic and Machine Learning Techniques for Efficient Resource Allocation in Next Generation Wireless Networks."
7. Qiuyang Shen, Ph.D. 2019, "Statistical Bayesian Inversion of Directional Electromagnetic Logging Data", joint with Dr. Jiefu Chen
8. Mounika Sai Errapotu, Ph.D. 2018, "Secure Computing with Privacy Preservation for Cyber-Physical Systems," joint with Dr. Miao Pan
9. Huaqing Zhang, Ph.D. 2017, "A Hierarchical Game Framework for Distributive Resource Allocation in Future HetNet."
10. Radwa Aly, Ph.D. 2017, "Utilizing Full Duplex Multiple Antenna System in Heterogeneous Networks."
11. Fahira Sangare, Ph.D. 2017, "RF Energy Harvesting and Information Transfer Implementation in the Internet of Things."
12. Hung Nguyen, Ph.D. 2017, "Big Data Optimization for Distributed Resource Management in Smart Grid."

13. Yunan Gu, Ph.D. 2016, "Matching Theory Framework for 5G Wireless Communications."
14. Yanru Zhang, Ph.D. 2016, "Contract Theory Framework for Wireless Networking."
15. Erte Pan, Ph.D. 2016, "Big Data Analysis of Complex Networks using Machine Learning Methods."
16. Ali Arab, Ph.D. 2015, "Asset Management Of Smart Grid Infrastructure For Resiliency Enhancement", Industrial Engineering, joint with Professor Suresh Khator.
17. Ateeth Kumar Thirukkovulur, M.S. 2015, "Novel Infrastructure Quantification For Utility Of Virtualized Network Debugging Using Openflow As Visualization Of Packets And Software Defined Networking," joint with Professor Deniz Gurkan.
18. Lanchao Liu, Ph.D. 2014, "Big Data Optimization for Modern Communication Networks," winner of National Excellent Ph.D Student Scholarship.
19. Najmeh Forouzandeh Mehr, Ph.D. 2013, "Game Theoretical Framework for Dynamic Control in Smart Grid".
20. Nam Tuan Nguyen, Ph.D. 2013, "A Nonparametric Bayesian Framework For Mobile Device Security And Location Based Services".
21. Guanbo Zheng, Ph.D. 2013, joint with professor Rong Zheng, "Toward Reliable and Robust Wireless Personal Area Networks".
22. Mohammad Esmalifalak, Ph.D. 2013, "Attack and Defense Mechanisms for State Estimation in Smart Grid".
23. Thanh Le, M.S. 2013, "Sequential Learning for Passive Monitoring of Multi-Channel Wireless Network".
24. Yi Huang, Ph.D. 2012, "A Quickest Detection Framework for Smart Grid".
25. Tina Mathews, M.S. 2012, "USRP2 Implementation of Compressive Sensing based Channel Estimation in OFDM".
26. Zhou Yuan, Ph.D. 2012, "A Framework Of Belief Propagation and Game Theory for Cognitive Radio Security and Routing".
27. Jia Meng, Ph.D. 2010, "Compressive Sensing Applications for Wireless Communications".
28. Barsha Shrestha, MS. 2008, "Wireless Access in Vehicular Environments using Bit Torrent and Bargaining".
29. Yong Xiao, Postdoc, now in Arizona State University, AZ.
30. Samir Medina Perlaza, Ph.D. Supelec, France, joint with Princeton University, now in Inria, France.
31. Walid Saad, Postdoc, Ph.D. University of Oslo, joint with Princeton University, now in professor in University of Miami.
32. Yingying Li, Postdoc, Ph.D. University of California, Los Angeles, joint with Rice University, now in Wall street.

VISITORS

- Professor Dusit (Tao) Niyato, School of Computer Engineering, Nanyang University, Singapore, Feb - Mar. 2008, July 2011
- Professor Husheng Li, Department of EECS, University of Tennessee, TN, Oct. 2008
- Professor Are Hjørungnes, UNIK, University of Oslo, Norway, Dec. 2008
- Dr. Nam Tran Nguyen, University of New South Wales, Australia, Jan. 2009
- Dr. Ninoslav Marina, University of Oslo, Norway, Feb. 2009
- Professor Ekram Hossain, University of Manitoba, Canada, Feb. 2009
- Professor Lijun Qian, Prairie View A&M University, TX, Mar. 2009
- Professor Walid, Saad, UNIK, University of Oslo, Norway, University of Miami, Mar. 2009, Mar. 2010
- Professor Ruhai Wang, Lamar University, TX, Sep. 2009
- Professor Ju Bin Song, Kyung Hee University, South Korean, Aug. 2009 - Aug. 2010
- Dr. Quanyan Zhu, University of Illinois at Urbana-Champaign, IL, Jan. 2010
- Dr. Lei Jiang, University Autonomia de Barcelona, Spain, Jan. 2010 - Mar. 2010
- Professor Wotao Yin, Rice University, TX, Jan. 2010; UCLA, CA, Apr. 2015
- Professor Jake Baker, Boise State University, ID, Jan. 2010
- Professor Andres Kwasinski, Rochester Institute of Technology, NY, Mar. 2010
- Professor Ashutosh Sabharwal, Rice University, TX, Apr. 2010
- Professor Tie Liu, Texas A&M University, TX, Apr. 2010
- Professor Wei Zhang, New South Wales University, Australia, Jun. 2010
- Professor Shuguang (Robert) Cui, Texas A&M University, TX, Sep. 2010
- Professor Zixiang Xiong, Texas A&M University, TX, Feb. 2011, Apr. 2012
- Professor Zhi Tian, Michigan Technological University, MI, Feb. 2011
- Professor Yang Xiao, University of Alabama, AL, Feb. 2011
- Professor Yu Cheng, Illinois Institute of Technology, IL, Mar. 2011
- Professor Le Xie, Texas A&M University, TX, Mar. 2011
- Professor Hamed Mohsenian-Rad, Texas Tech University, TX, Apr. 2011
- Dr. Yifan Li, Nanyang Technology University, Singapore, Apr. 2011
- Professor Jianwei Huang, Chinese University of Hong Kong, Dec. 2011
- Professor Angela Zhang, Chinese University of Hong Kong, Dec. 2011
- Professor Guoqiang Mao, National University of Australia, Dec. 2011
- Professor Xinbin Wang, Shanghai Jiaotong University, Dec. 2011
- Professor Eryk Dutkiewicz, Macquarie University, Australia, Dec. 2011
- Mr. Chen Wang, Shanghai Jiaotong University, Jan. 2012 – Jun. 2012
- Professor Thad Welch, Boise State University, Feb. 2012
- Dr. Wooyeol Choi, GIST, South Korea, Mar. 2012
- Professor Hongyi Wu, University of Louisiana at Lafayette, Apr. 2012
- Professor Rao Thammavaram, University of Louisiana at Lafayette, Apr. 2012
- Professor Guowang Miao, KTH, the Royal Institute of Technology, Sweden, Jul. 2012
- Professor Qing Ling, University of Science and Technology of China, Aug. 2012 – Aug. 2013
- Professor Miao Pan, Texas Southern University, Oct. 2012
- Professor Chengshan Xiao, Missouri University of Science and Technology, Jan. 2013
- Professor Mehdi Abolhassani, College of Technology, University of Houston, Dec. 2013
- Professor Qi Su, Newcastle University, UK, Jun., 2014
- Dr. Yangqing Li, Beijing University of Posts and Telecommunications, Aug. 2014- Aug. 2015

- Dr. Jia You, Beijing Jiaotong University, May 2014- May 2015
- Dr. Yingyu Li, Xidian University, Aug. 2014- Aug. 2016
- Dr. Yun Hu, Xidian University, Aug. 2014- Aug. 2015
- Professor Hang Qin, Yangtze University, China, Aug. 2014- Aug. 2015.
- Professor Mingyi Hong, Iowa State University, Nov. 2014
- Professor Nguyen Hoang Tran, Kyung Hee University, South Korea, Dec., 2014
- Professor Zaher Dawy, American University of Beirut, Lebanon, Dec. 2014
- Professor Minming Ni, Beijing Jiaotong University, China, Dec. 2014
- Professor Hui Yang, University of South Florida, Mar. 2015
- Professor Fang Yang, Tsinghua University, China, Apr. 2015
- Professor Amin Khodaei, University of Denver, Apr. 2015
- Professor Chungang Yang, Xidian University, China, Mar. 2015 - Mar. 2016
- Dr. Chufei Ouyang, Wuhan University, Aug. 2015- Sep. 2015.
- Dr. Xiao Tang, Xi'an Jiaotong University, Sep. 2015- Aug. 2016.
- Professor Shaolei Ren, University of California, Riverside, Sep. 2015.
- Professor Husheng Li, University of Tennessee, Sep. 2015- Aug. 2016.
- Professor Guiling Wang, NJIT, Nov. 2015,
- Dr. Huu Ngoc Duy Nguyen, McGill, Nov. - Dec. 2015.
- Professor Liang Xiao, Xiamen University, China, Dec. 2015.
- Dr. Wenbo Wang, Tsinghua University, China, Jan.-Mar. 2016.
- Dr. Xianfu Chen, VTT, Finland, Mar.-Apr. 2016.
- Professor Wei Song, University of New Brunswick, Canada, Mar.-Apr. 2016.
- Professor Yu Wang, University of North Carolina at Charlotte, May 2016.
- Professor Mei Li, China University of Geosciences, August 2016 - July 2017.
- Dr. Minsu Shin, Samsung, Korea, August 2016-November 2016.
- Professor Xuefang Liu, Xidian University, China, September 2016 - September 2017.
- Ye Yu, Beijing Institute of Technology, September 2016 - September 2018.
- Hui Chen, Beijing University of Posts and Telecommunications, September 2016 - September 2017.
- Professor Haitao Xu, University of Science and Technology Beijing, October 2016 - April 2017.
- Professor YiFei Wei, Beijing University of Posts and Telecommunications, November 2016 - May 2017.
- Dr. Chen-Feng Liu, University of Oulu, Finland, December 2016.
- Dr. Liangliang Zhang, University of Electronic Science and Technology of China, December 2016 - December 2017.
- Professor Shaohua Qin, Shandong Normal University, China, December 2016- December 2017.
- Professor Francis Bui, University of Saskatchewan, Canada, July 2017 – July 2018.
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- Dr. Xuelin Cao, Northwestern Polytechnical University, China, September 2017 – September 2018.
- Dr. Zhikun Wu, Beijing Institute of Technology, China, September 2017 – September 2018.
- Dr. Chunxia Su, Harbin Engineering University, China, September 2017 – September 2018.
- Dr. Chuanyin Li, Xidian University, China, September 2017 – September 2018.
- Dr. Di Zhou, Xidian University, China, September 2017 – September 2018.

- Professor Hongyuan Yang, Jilin University, October 2018 - October 2019.
- Dr. Junhua Wang, Chongqing University, October 2018 - October 2019.
- Professor Tingting Liu, Nanjing University of Posts and Telecommunications, November 2017 - November 2018.
- Dr. Ruoguang Li, Beijing University of Posts and Telecommunications, December 2017 - December 2018.
- Dr. Zhongyu Miao, Beijing University of Posts and Telecommunications, December 2017 - December 2018.
- Professor Wu Fang, Suzhou Institute of Trade & Commerce, February 2018- February 2019.
- Professor Jian Zhou, Anhui University of Finance and Economics, China, March 2018 - March 2019
- Professor Lisheng Yang, Congqing University, China, April 2018- April 2019.
- Dr. Benedetta Picano, University of Florence, Italy, May 2018 - May 2019.
- Dr. Zejian Feng, Tsinghua University, China, May 2018- May 2019.
- Dr. Yue Yu, Southeast University, China, September 2018- September 2019.
- Professor Guobin Zhang, Dongguan University of Technology, China, September 2018- September 2019.
- Professor Long Zhang, Hebei University of Engineering, China, September 2018- September 2019.
- Dr. Ziyi Jia, Xidian University, China, October 2018-October 2019.
- Dr. Yan Zhu, Xidian University, China, October 2018-October 2019.
- Dr. Yu Zhang, Tsinghua University, China, October 2018-October 2019.
- Professor Huaizhu Zhang, Jilin University, China, October 2018-October 2019.
- Professor Qixun Zhang, BUPT China, October 2018-October 2019.
- Dr. Lun Li, Beijing Jiaotong University, China, November 2018, November 2019.
- Dr. Jingxian Liu, Beijing Jiaotong University, China, November 2018, November 2019.
- Professor Li Wang, BUPT China, January 2019-February 2019.
- Dr. Minghui Min, Xiamen University, February 2019 - February 2020.
- Professor Enchang Sun, Beijing University of Technology, April 2019 - April 2020.
- Dr. Zirui Zhuang, BUPT China, June-December 2019.
- Dr. Mykola Sevetnyk, National Chiao Tun University, Taiwan, China, July-September 2019.
- Professor Linhang Zhang, Associate Professor, Jilin University, China, September 2019-September 2020.
- Dr. Yongsheng Cao, Donghua University, China, September 2019-September 2020.
- Dr. Zhuang Ling, Jilin University, September 2019-September 2020.
- Dr. Danye Wu, Institute of Computing Technology, Chinese Academy of Sciences, China, October 2019-October 2020.
- Dr. Jingwen Tong, Xiamen University, China, November 2019-November 2020.
- Dr. Yali Chen, Beijing Jiaotong University, China, November 2019-November 2020.
- Dr. Yang Yang, Beijing Jiaotong University, China, November 2019-November 2020.
- Professor Choong Seon Hong, Kyung Hee University, South Korea, December 2019-December 2020.

- Area Editor in Resource Management and Network Optimization, IEEE Journal on Selected Areas in Communications, Series in Machine Learning in Communications and Networks, 2020 - Present
- Online Editorial Team, IEEE Transactions on Wireless Communications, 2019 - Present
- Senior Editor, IEEE Access, 2016 - Present.
- Associate Editor, Journal of Communications and Networks, 2015 - Present.
- Associate Editor, IEEE Transactions on Vehicular Technology, 2021 - present.
- Associate Editor, IEEE Transactions on Wireless Communications, 2010 - 2015.
- Guest Editor, Journal of Communications and Networks, special issue on “Aerial Access Networks for 6G,” 2022.
- Guest Editor, IEEE Wireless Communications, special issue on “Smart Communication Protocols and Algorithms for Resilient Mobile Networks,” 2022.
- Guest Editor, IEEE Journal of Selected Topics on Signal Processing, special issue on “Antenna Array Enabled Space/Air/Ground Communications and Networking, 2022.
- Guest Editor, IEEE Journal of Selected Topics on Signal Processing, special issue on “Advanced Signal Processing Techniques and Communication Applications for Distributed Machine Learning”, 2021.
- Guest Editor, IEEE Open Journal of Vehicular Technology, Special Issue on Distributed Intelligence for Future Vehicular Networks, 2021.
- Guest Editor, IET Communications, Special Issue on Emerging and Future Aerial Access Networks for 5G and Beyond, 2021.
- Guest Editor, IEEE Transactions on Industrial Informatics, special issue on Green Industrial Internet of Things, 2020.
- Guest Editor, Hindawi Wireless Communications and Mobile Computing, Special issue for Deep Learning Driven Wireless Communications and Mobile Computing, 2019.
- Guest Editor, IEEE Signal Processing Magazine Special Issue for Contactless Monitoring of Critical Infrastructure, 2018.
- Guest Editor, IEEE Internet of Things Journal Special Issue on Wireless Energy Harvesting for Internet of Things, 2018.
- Guest Editor, IEEE Wireless Communication Magazine on Content-Centric Collaborative Edge Caching in 5G Mobile Internet, 2017.
- Guest Editor, IEEE Communication Magazine Special Issue on Heterogeneous Ultra Dense Networks, 2017.
- Guest Editor, IEEE Transactions on Emerging Topics in Computing, “Spectrum Sharing and Aggregation for Future Wireless Networks,” 2016.
- Guest Editor, IEEE Transactions on Emerging Topics in Computing, Special Issue on Big Data Computing for Smart Grid 2016.
- Guest Editor, IEEE Wireless Communications Magazine, Special Issue on Wireless Powered Communications Networks, 2016.
- Guest Editor, IEEE Access, Special Issue on Ultra-Dense Cellular Networks, 2016.
- Guest Editor, EURASIP Journal on Wireless Communications and Networking thematic series on “Full-Duplex Radio: Theory, Design, and Applications”, 2016.
- Guest Editor, JCN Special Issue On Big Data Over Networks, 2015.
- Guest Editor, JCN Special Issue On Cyber Physical Systems, 2013.
- Guest Editor, IEEE Network Magazine, Special Issue on Security in Cognitive Radio Networks, 2012.

- Guest Editor, IEEE Journal on Selected Areas in Communications, “Cooperative Networking: Challenges and Applications,” 2011.
- Guest Editor, Special Issue on Game Theory in Wireless Networks, EURASIP Journal on Advances in Signal Processing, 2009.
- Guest Editor, Special Issue on Fairness of Radio Resource Management Techniques in Wireless Networks, EURASIP Journal on Wireless Communications and Networking, 2009.
- Guest Editor, Special Issue on Cross-layer Optimized Wireless Multimedia Communications, Journal of Advances in Multimedia, 2007.

Conference Organizer

- Chair, Global Summit and Expo on Robot Intelligence Technology and Applications (GSERITA), 2022.
- International Cooperation Co-Chair, International Conference on Information Networking (ICOIN), 2021.
- Track Chair, The 16th International Conference on Mobility, Sensing, and Networking (IEEE MSN), 2020.
- Workshop co-Chair, Edge Machine Learning for 5G Mobile Networks and Beyond, IEEE International Conference on Communications, 2020.
- International Cooperation Co-Chair, International Conference on Information Networking (ICOIN), 2020.
- General Chair, MobiQuitous, 2019.
- TPC Co-chairs, IEEE Smartgridcom, 2019.
- Workshop Organizer, Wireless Energy Harvesting Communication Networks, IEEE Globecom, 2018.
- Workshop Organizer, 5G Ultra Dense Networks, IEEE International Conference on Communications, 2018.
- Publicity Chair, the 23rd Asia Pacific Conference on Communications, 2017.
- Publication Co-Chair, IEEE International Conference on Communications in China, 2017.
- Steering Committee, Wireless Energy Harvesting Communication Networks Workshop, IEEE Globecom, 2016.
- TPC Co-Chair, Wireless Communications Systems Symposium, IEEE International Conference on Communications in China, 2016.
- TPC Chair, IEEE International Conference on Communications, Workshop on Wireless Physical Layer Security, 2016.
- TPC Chair, the 2nd International Conference on Big Data Computing and Communication (BIGCOM), 2016.
- TPC Chair, IEEE Workshop on Wireless Powered Communication Networks (WPC-Nets), together with IEEE WCNC 2016.
- Chair, IEEE GlobalSIP 2014 Workshop on Game Theory for Signal Processing and Communications, 2014.
- Organizing Committee, IEEE International Conference on Communications, Workshop on Wireless Physical Layer Security, 2015.
- Symposium Chair, Wireless Networking, IEEE International Conference on Communications in China, 2013.
- General Chair, 1st IEEE INFOCOM Workshop on Communications and Control for Sustainable Energy Systems: Green Networking and Smart Grids, 2012.

- TPC Chair, IEEE INFOCOM Workshop on Communications and Control for Smart Energy Systems (CCSES), 2013, 2014.
- Program Chair, International Workshop on Practical Issues and Applications in Next Generation Wireless Networks (PINGEN), in conjunction with ACM MOBICOM 2012, Istanbul, Turkey, August 22-26, 2012.
- Organizing Committee, Communications Technologies for Smart Grid, IEEE Globecom Workshop, 2011.
- Wireless Communications Symposia Chair, IEEE International Conference on Computer Communications and Networks (ICCCN) Conference, 2011.
- Wireless Communications Symposia Co-Chair, 74th IEEE Vehicular Technology Conference (VTC), Fall 2011.
- Communication and Information Theory Symposia Co-Chair of the 6th International Wireless Communications and Mobile Computing Conference (IWCMC), 2010 (best symposium), 2012.
- Local Chair of The Seventh International ICST Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (QShine), 2010.
- Publicity Co-chair of Conference on Decision and Game Theory for Security (GameSec), 2010.
- Cooperative and Cognitive Networks Workshop Co-Chair of International Wireless Communications and Mobile Computing Conference (IWCMC 2009).
- MAC Symposium Vice Chair of IEEE Wireless Communications and Networking Conference, 2008.
- Publicity Chair of Cognitive Radio Workshop with IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2008, 2012.

Tutorials

1. “Blockchain and Cryptoeconomics for Cyber-physical System and Wireless Networks,” IEEE GLOBECOM 2021.
2. “Reconfigurable Intelligent Surfaces for 6G: Communications, Localization, and Sensing,” IEEE GLOBECOM 2021.
3. “MetaEverything: Intelligent Meta-Material Aided Sensing and Communications,” IEEE Vehicular Technology Conference (VTC) Fall 2021.
4. “MetaEverything: Intelligent Meta-Surface Aided Sensing and Communications,” IEEE International Conference on Communications, 2021.
5. “MetaEverything: Intelligent Meta-Surface Aided Sensing and Communications,” IEEE Wireless Communications and Networking Conference, 2021.
6. “Aerial Access Networks for 6G: From UAV, HAP, to Satellite Communication Networks,” IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2020.
7. “Reconfigurable Intelligent Surface for 6G: Communication, Sensing, and Localization,” IEEE/CIC International Conference on Communications (ICCC) in China 2020.
8. “Aerial Access Networks for 6G: From UAV, HAP, to Satellite Communication Networks,” IEEE International Conference on Communication (ICC) 2020.

9. "UAV Communications in 5G and Beyond: Integration of Sensing, Control, and Learning," IEEE Wireless Communications and Networking Conference, 2020.
10. "UAV Applications over Cellular Networks: Sensing, Communication, and Computation," IEEE International Conference on Communication (ICC) 2019.
11. "UAV-based Sensing and Communications for 5G and Beyond," IEEE/CIC International Conference on Communication in China (ICCC) 2019.
12. "Signal Processing for Big Data Analytics: Fundamental and Applications," IEEE Global Communications Conference (Globecom), 2018.
13. "Big Data Signal Processing for Communication Networks," IEEE Global Communications Conference (Globecom), 2017.
14. "5G Wireless Communications: Enabling Technologies and Resource Management," IEEE Global Communications Conference (Globecom), 2016.
15. "Full-Duplex Communications and Networks," IEEE International Conference on Communications in China (ICCC), 2016.
16. "Distributed Resource Allocation for 5G Communications and Networks," IEEE International Conference on Communications (ICC), 2016.
17. "Full-Duplex Communications and Networks: Fundamentals, Technologies, and Applications," IEEE Global Communications Conference (Globecom) 2015.
18. "Resource Allocation for Full-Duplex Communication and Networks," IEEE International Conference on Communication (ICC) 2015.
19. "Full-Duplex Wireless Communication and Networks: Key Technologies and Applications", IEEE International Conference on Communication in China (ICCC) 2014.
20. "Game-theoretic Methods for Device-to-Device Communications", IEEE International Conference on Communication (ICC) 2014.
21. "Wireless Device-to-Device Communications and Networks", IEEE Global Communications Conference (Globecom) 2013.
22. "Smart Grid Communications and Networking", IEEE International Conference on Communication (ICC) 2013.
23. "Resource Allocation in Wireless Physical Layer Security," IEEE Wireless Communications and Networking Conference (WCNC) 2013.
24. "Device to Device Communication for Next Generation Wireless Networks", IEEE International Conference on Communication in China (ICCC) 2013.
25. "Smart Grid Communications and Networking," CHINACOM-2012.
26. "Application of Game Theory for Designing Cognitive Radio Networks," IEEE International Conference and Communication (ICC) 2010.
27. "Coalitional Game Theory in Wireless Networks," IEEE Wireless Communications and Networking Conference (WCNC) 2010.
28. "Game Theory for Cognitive Radio Networks," IEEE Global Communications Conference (Globecom) 2009.

Technical Program Committee

- Member of Technical Program Committee of IEEE/ACM INFOCOM, 2011-2022.
- Member of Technical Program Committee of IEEE Global Communications Conference, 2005-2021.
- Member of Technical Program Committee of IEEE International Conference on Communications, 2004-2022.
- Member of Technical Program Committee of IEEE Wireless Communications and Networking Conference, 2005-2022.
- International Cooperation Co-Chair, International Conference on Information Networking (ICOIN), 2022
- Member of Technical Program Committee of IEEE SmartGridComm, 2012-2020.
- Member of Technical Program Committee of IEEE GlobalSIP, 2014-2018.
- Member of Technical Program Committee of IEEE Blockchain 2020
- Member of Technical Program Committee of IEEE International Conference on Distributed Computing Systems (ICDCS) 2019.
- Member of Technical Program Committee of IEEE COMNETSAT 2019.
- Member of Technical Program Committee of IEEE SPAWC 2019.
- Member of Technical Program Committee of IEEE WiSEE, 2018, 2019, 2020.
- Member of Technical Program Committee of IEEE COMNETSAT, 2018.
- Member of Technical Program Committee of IEEE 7th International Conference on Cloud Networking (CloudNet), 2018, 2019
- Member of Technical Program Committee of International Conference on Computing, Networking and Communications (ICNC), 2019, 2020
- Member of Technical Program Committee of IEEE International Conference on Computer Communications and Networks (ICCCN) Conference, 2007, 2009, 2014, 2017.
- Member of Technical Program Committee of IEEE Milcom, 2016-2021.
- Member of Technical Program Committee of International Conference on Wireless Communications and Signal Processing, 2017-2020.
- Member of Technical Program Committee of IEEE International Symposium on New Frontiers in Dynamic Spectrum Access Networks (DYSPAN), 2011.
- Member of Technical Program Committee of IEEE 10th International Symposium of Modeling and Optimization of Mobile, Ad Hoc, and Wireless Networks (WiOpt), 2012, 2013, 2014.
- Member of Technical Program Committee of IEEE Conference on Communications and Network Security, 2013.
- Member of Technical Program Committee of IEEE International Conference on Green Computing and Communications, 2013
- Member of Technical Program Committee of IEEE International Conference on Communications, Workshop SmallNets, 2013.
- Member of Technical Program Committee of 8th international conference on Wireless algorithms, systems, and applications, 2013.
- Member of Technical Program Committee of Conference on Decision and Game Theory for Security (GameSec), 2012.
- Member of Technical Program Committee of IEEE/CIC International Conference on Communications in China, 2012, 2014, 2017, 2019, 2020, 2021.
- Member of Technical Program Committee of the 10th IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS), 2013.
- Member of Technical Program Committee of the 8th International workshop on Resource Allocation and Cooperation in Wireless Networks, 2012.

- Member of Technical Program Committee of 2012 International Conference on Wireless Communications and Signal Processing, 2012, 2014.
- Member of Technical Program Committee of Fifth International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP), 2011.
- Member of Technical Program Committee of IEEE Consumer Communications and Networking Conference 2005, 2006, 2008, 2009.
- Member of Technical Program Committee of Workshop on “Cognitive Wireless Networks and Systems - Cognitive Radio Networking” 2009.
- Member of Technical Program Committee of ChinaCom 2008, 2009.
- Member of Technical Program Committee of IEEE International Conference on Wireless and Mobile Computing, Networking and Communications, 2008, 2009.
- Member of Technical Program Committee of IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) 2010, 2013–2020.
- Member of Technical Program Committee of Third IEEE Workshop on Networking Technologies for Software Defined Radio (SDR) Networks, 2008.
- Member of Technical Program Committee of First ACM International Workshop on Medical-Grade Wireless Networks, 2009.
- Member of Technical Program Committee of 3rd ICST/ACM International Workshop on Game Theory in Communication Networks, Gamecomm2009, 2009.
- Member of Technical Program Committee of Cognitive Wireless Communications and Networking (CWCN) Workshop, 2009.
- Member of Technical Program Committee of IEEE Vehicular Technology Conference Spring, 2004, Fall, 2007, Fall 2008, Spring 2009, Spring 2010, Spring 2011, Fall 2012.
- Member of Technical Program Committee of International Wireless Communications and Mobile Computing Conference 2007, 2009.
- Member of Technical Program Committee of The 8th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (IEEE WoWMoM 2007), 2007, 2020.
- Member of Technical Program Committee of International Symposium on Multimedia over Wireless (WirelessCom), 2005, 2006.
- Member of Technical Program Committee of International Wireless Communication and Mobile Computing Conference (IWCMC), 2006, 2008, 2014, 2017-2021.
- Member of Technical Program Committee of IEEE Canadian Conference on Electrical & Computer Engineering (CCECE), 2018.
- Member of Technical Program Committee of 12th Communications and Networking Simulation Symposium (CNS’09).
- Member of Technical Program Committee of International Conference on Quality of Service in Heterogeneous Wired/Wireless Networks (QShine), 2004, 2005, 2006.
- Member of Technical Program Committee of Workshop on Game Theory for Networks (GameNets) in First International Conference on Performance Evaluation Methodologies and Tools, 2006.
- Member of Technical Program Committee of International Conference on Communications, Circuits and Systems, 2005, 2009.
- Member of Technical Program Committee of the 15th Asia-Pacific Conference on Communications, 2009.

Plenary, Keynote and Invited Talk in Conference

- Keynote “Mean Field Game Applications in Robots and UAVs,” International Meet

- & Expo on Robot Intelligence Technology and Applications (ROBOTMEET), 2022
- Plenary, “Mean Field Game Applications in Robots and UAVs,” Global Summit and Expo on Robot Intelligence Technology and Applications (GSERITA), 2022.
- Keynote, “Federated Learning and Analysis in Mobile Edge Computing,” Wutong Forum, 2021
- Keynote, “Distributed Deep Reinforcement Learning for Renewable Energy Accommodation Assessment with Communication Uncertainty in Internet of Energy,” TUBA World Conference on Energy Science and Technology (TUBA WCEST), 2021
- Keynote, “Federated Learning and Analysis in Mobile Edge Computing,” International Conference on Big Data and Intelligent Decision Making (BDIDM), 2021
- Keynote, “MetaSensing: Reconfigurable intelligent surface Assisted RF 3D Sensing using Machine Learning,” The International Conference on Advanced Communication Technologies and Networking (CommNet), 2021
- Keynote, “Federated Learning and Analysis in Mobile Edge Computing,” International Conference on Artificial Intelligence of Things (AIoT), 2021
- Keynote, “Federated Learning and Analysis in Mobile Edge Computing,” International Conference on Sensors, Signal and Image Processing (SSIP), 2021
- Keynote, “Aerial Access Networks for IoT: From UAV, HAP, to Satellite Communication Networks,” Computing, Communications and IoT Applications (ComComAp) Conference, 2021.
- Keynote, “Federated Learning and its Applications in Big Data and Edge Computing,” IEEE the 6th International Conference on Cloud Computing and Big Data Analytics, 2021.
- Plenary Speaker, “Mean Field Game for Robots,” ROBOTMEET, 2021.
- Keynote, “Big Data Analysis and Cross-Layer Optimization for Communication, Caching and Computing Networks,” Third International Conference on Big Data Engineering and Technology, 2021
- Keynote, “Reconfigurable Intelligent Surface for 6G: Communication, Sensing, and Localization,” IEEE Wireless Communication and Networking Conferences Workshop on Reconfigurable Intelligent Surfaces for 5G and Beyond, 2021
- Keynote, “Aerial Access Networks for 6G: From UAV, HAP, to Satellite Communication Networks,” International Conference on Information Networking (ICOIN), 2021.
- Keynote, “Signal Processing for Big Data Analytics,” 5th IEEE International Conference on Big Data Analysis, Xiamen, China, 2021.
- Keynote, “Aerial Access Networks for 6G: From UAV, HAP, to Satellite Communication Networks,” IEEE International Conference on Space-Air-Ground Computing, 2020.
- Keynote, “Big Data Analysis and Cross-Layer Optimization for Communication, Caching and Computing Networks,” The International Conference on Big data, IoT, and Cloud Computing (ICBICC), Tokyo, Japan, 2020.
- Keynote, “Big Data Analysis and Cross-Layer Optimization for Communication, Caching and Computing Networks,” 3RD Workshop on Intelligent Computing and Caching at the Network Edge, IEEE Wireless Communications and Networking Conference, Seoul, South Korea, 2020.
- Keynote, “Big Data Analysis and Cross-Layer Optimization for Communication, Caching and Computing Networks,” 5th IEEE International Conference on Big Data Analysis, Xiamen, China, 2020.

- Keynote, “Resource Allocation for Full Duplex Communication and Networks,” Full Duplex Workshop at IEEE International Conference on Communications, Shanghai, China, 2019.
- Distinguished Lecture, “Signal Processing for Big Data Analytics,” International Conference on Computing, Networking and Communication, Honolulu, HA, February 2019.
- Keynote Talk, “Mean Field Game for Ultra Dense Networks,” *8th EAI International Conference on Game Theory for Networks*, Seoul, South Korea, April 2018.
- Invited Talk, “Big Data Analysis for Smart Grid,” *International Conference on Computing, Networking and Communications*, Hawaii, March 2018.
- Plenary Talk, “Case Study of Big Data Analysis for Smart Grid,” IFOST, Ulsan, Korea, May 2017
- Plenary Talk, “Full Duplex Communication and its Impact on Wireless Networking”, *IEEE Globecom Full Duplex Wireless Communications Workshop*, Washington DC, 2016.
- Keynote Speech, “Big Data Analysis: Techniques and Applications,” *DELTA Summer workshop*, Finland, August 2016.
- Invited Talk, “Resource Allocation in Small Cell Networks with Massive MIMO,” *International Conference on Computing, Networking and Communications*, Hawaii, February 2016.
- Invited Talk, “Multi-Block ADMM for Big Data Optimization in Smart Grid,” *International Conference on Computing, Networking and Communications*, Anaheim, CA, February, 2015.
- Keynote Speak, “Wireless Device-to-Device Communications and Game Theoretical Resource Allocation,” *International Workshop on Wireless Networks: Communication, Cooperation and Competition*, Hammamet, Tunisia, May 2014.
- Plenary Talk, “Cooperation for Cognitive Radios,” *the 4th International Workshop on Game Theory in Communication Networks (Gamecomm)*, Paris, France, May 2011.

Other Services

- Best Paper Award Committee, IEEE International Conference on Communication, 2018
- Publication Award Committee, IEEE ComSoc Technical Committee on Cognitive Networks (TCCN), 2017, 2018
- Award Board Member, IEEE ComSoc Multimedia Communications Technical Committee (MMTC), 2010-2014.
- Panel, “The Data Scientist: Are they the missing link of analytics-enabled transformation?” Utility Analytics Week, Atlanta, GA, September, 2013.

Proposal, Book and Journal Reviewer

- National Science Foundation Panelist
- IEEE Senior Member Evaluation Panelist
- US Department of Energy Panelist
- American Association for the Advancement of Science Panelist
- European Research Council Panelist
- The Research Grants Council (RGC) of Hong Kong
- U.S.-Israel Binational Science Foundation
- Canada Foundation for Innovation

- Cambridge University Press; John Wiley & Sons, Inc.
- IEEE Xtreme judge
- IEEE Transactions on Information Theory; IEEE Transactions on Communications; IEEE Journal on Selected Areas on Communications, IEEE Transactions on Wireless Communications; IEEE Transactions on Signal Processing; IEEE Transactions on Mobile Computing; IEEE Transactions on Image Processing; IEEE Transactions on Circuits and Systems for Video Technology; IEEE Transactions on Cybernetics; IEEE Communication Letters; IEEE Signal Processing Magazine; IEEE Network Magazine; IEEE Communications Magazine; IEEE Transactions on Broadcasting; IEEE Internet of Things Journal IEEE Transactions on Computational Intelligence and AI in Games; IEEE Transactions on Circuits and Systems I; Optimization and Engineering; Wiley Wireless Communications & Mobile Computing; EURASIP Journal on Applied Signal Processing; ACM Mobile Computing and Communications Review; IEE Proceeding on Communications; Transactions on Computational Intelligence and AI in Games.

University Services

- Cougar Chair Leadership Academy (Department Chair Training)
- Director of Computer System Engineering MS Program under the College of Engineering
- Engineering College Promotion and Tenure Committee
- Faculty Search Committee
- Graduate Course Committee
- Graduate Admission Committee
- ECE Faculty Goal Setting Committee

PUBLICATIONS

Textbooks

1. Zhu Han and K. J. Ray Liu, *Resource Allocation for Wireless Networks: Basics, Techniques, and Applications*, Cambridge University Press, UK, April, 2008.
2. Ekram Hossain, Dusit Niyato, and Zhu Han, *Dynamic Spectrum Access and Management in Cognitive Radio Networks*, Cambridge University Press, UK, 2009.
3. Zhu Han, Dusit Niyato, Walid Saad, Tamer Basar, and Are Hjørungnes, *Game Theory in Wireless and Communication Networks: Theory, Models and Applications*, Cambridge University Press, UK, 2011.
4. Zhu Han, Husheng Li, and Wotao Yin, *Compressive Sensing for Wireless Networks*, Cambridge University Press, UK, 2013 (Chinese version by Tsinghua University Press Limited 2014).
5. Lingyang Song, Dusit Niyato, Zhu Han, and Ekram Hossain, *Wireless Device-to-Device Communications and Networks*, Cambridge University Press, UK, 2015 (Chinese version by China Machine Press 2016).
6. Zhu Han, Mingyi Hong, and Dan Wang, *Signal Processing and Networking for Big Data Applications*, Cambridge University Press, UK, 2017.
7. Lingyang Song, Risto Wichman, Yonghui Li, and Zhu Han, *Full-Duplex Communications and Networks*, Cambridge University Press, UK 2017.
8. Zhu Han, Dusit Niyato, Walid Saad, and Tamer Basar, *Game Theory for Next-Generation Wireless and Communication Networks: Modeling, Analysis, and Design*, Cambridge University Press, UK, 2019.

9. Dusit Niyato, Nguyen Cong Luong, Ping Wang, and Zhu Han, *Auction Theory for Data Communications and Networking: Fundamentals and Applications*, Cambridge University Press, UK, 2020.
10. Lingyang Song, Zhu Han, Boya Di, and Hongliang Zhang, *Aerial Access Networks: Integration of UAVs, HAPs, and Satellites*, Cambridge University Press, UK, 2021.
11. Wenbo Wang, Jing Li, Dusit Niyato, and Zhu Han, *Cryptoeconomics: Economic Mechanisms behind Blockchains*, contract with Cambridge University Press, UK.

Edited Book

12. Ekram Hossain, Zhu Han, and Vincent Poor, *Smart Grid Communications and Networking*, Cambridge University Press, UK, 2012 (Chinese version by Publishing House of Electronic Industry, China, 2013).

Research Monograph Books

1. Choong Seon Hong, Latif U. Khan, Mingzhe Chen, Dawei Chen, Walid Saad, and Zhu Han, “Federated Learning for Wireless Networks,” contracted with Springer Science + Business Media, LLC.
2. Reginald A. Banez, Lixin Li, Chungang Yang, and Zhu Han, “Mean Field Game and its Applications in Wireless Networks,” contracted with Springer Science + Business Media, LLC.
3. Hongliang Zhang, Boya Di, Lingyang Song, and Zhu Han, “Reconfigurable Intelligent Surface-Empowered 6G,” contracted with Springer Science + Business Media, LLC.
4. Qiuyang Shen, Jiefu Chen, Xuqing Wu, Yueqin Huang, and Zhu Han, “Statistical Inversion of Electromagnetic Logging Data,” Springer Science + Business Media, LLC, 2020.
5. Hongliang Zhang, Lingyang Song, and Zhu Han, “UAV Communications over Cellular Networks,” Springer Science + Business Media, LLC, 2020.
6. Miao Pan, Jinyi Wang, Sai Mounika Errapotu, Xinyue Zhang, Jiahao Ding, and Zhu Han, “Big Data Analytics: Privacy for Cyber-Physical Systems,” Springer Science + Business Media, LLC, 2019.
7. Huaqing Zhang, Sami Khairy, Lin X. Cai, and Zhu Han, “Resource Allocation in Unlicensed Long Term Evolution HetNets,” Springer Science + Business Media, LLC, 2017.
8. Zhu Han, Yunan Gu, and Walid Saad, “Matching Theory for Wireless Networks,” Springer Science + Business Media, LLC, 2017.
9. Yanru Zhang and Zhu Han, “Contract Theory For Wireless Networks,” Springer Science + Business Media, LLC, 2017.
10. Hongliang Zhang, Lingyang Song, Zhu Han, and Yingjun (Angela) Zhang, “Hypergraph Theory in Wireless Communication Networks,” Springer Science + Business Media, LLC, 2017.
11. Tianyu Wang, Lingyang Song, Walid Saad, and Zhu Han, “Overlapping Coalition Formation Games in Wireless Communication Networks,” Springer Science + Business Media, LLC, 2016.

12. Yun Liao, Tianyu Wang, Lingyang Song and Zhu Han, "Listen and Talk: Full-duplex Cognitive Radio Networks," Springer Science + Business Media, LLC, 2016.
13. Dan Wang and Zhu Han, "Sublinear Algorithms for Big Data Applications," Springer Science + Business Media, LLC, 2015.
14. Chen Xu, Lingyang Song and Zhu Han, "Resource Management for Device-to-Device Underlay Communication," Springer Science + Business Media, LLC, 2013.

Book Chapters

1. Dawei Chen, Yin-Chen Liu, BaekGyu Kim, Jiang Xie, Choong Seon Hong, and Zhu Han, "Hierarchical Meta-Learning for Multi-access Edge Computing: Framework and Applications," *Meta-Learning with Medical Imaging and Health Informatics Applications*, Elsevier, editor: Hien Van Nguyen and Rama Chellappa.
2. Kevin Tsai, Hanlin Mou, Lianming Xu, Li Wang, and Zhu Han "Social Networking Driven Caching," *Edge Caching for Mobile Networks*, IET, editors: Vincent Poor and Wei Chen, 2020.
3. Tingting Liu, Jun Li, Feng Shu, and Zhu Han, "Contract-Theory Based Approach for Caching," *Edge Caching for Mobile Networks*, IET, editors: Vincent Poor and Wei Chen, 2020.
4. Haijun Zhang, George K. Karagiannidis, and Zhu Han, "Power Control in Full Duplex Ultra-Dense Networks," *Ultra-Dense Networks*, Cambridge University Press, Cambridge, UH, editors: Haijun Zhang, Jemin Lee, Tony S. Quek and Chih-Lin I, 2019
5. Mbazingwa E. Mkiramweni, Chungang Yang, Zhu Han, "Mean Field Games for 5G Ultra-Dense Networks: A Resource Management Perspective," *Ultra-Dense Networks for 5G and Beyond: Modelling, Analysis and Design*, Wiley, Hoboken, NJ, editors: Trung Q. Duong, Xiaoli Chu, and HIMAL A Suraweera, 2019.
6. Huaqing Zhang and Zhu Han, "Distributed Resource Allocation for Network Virtualization," *Handbook of Cognitive Radio*, Springer, editors: Lingyang Song and Wei Zhang, 2019.
7. Neetu Raveendran, Kaigui Bian, Lingyang Song, and Zhu Han, "A Social Choice Theoretic Approach for Analyzing User Behavior in Online Streaming Mobile Applications," *Game Theory for Networking Applications*, EAI/Springer, editors: Ju Bin Song, Husheng Li, and Marceau Coupechoux, 2019.
8. Fahira Sangare and Zhu Han, "RF Energy Harvesting Networks: Existing Techniques and Hardware Technology," *Wireless Energy Harvesting for Future Wireless Communications*, Springer-Verlag New York, USA, editors: Nalin Jayakody, John Thompson, Symeon Chatzinotas, and Salman Durrani, 2018.
9. Yunan Gu, Lin Cai, Lingyang Song, and Zhu Han, "LTE-Unlicensed and Corresponding Distributed Resource Allocation," *Emerging Technologies for 5G Wireless Systems*, Cambridge University Press, editors: Vincent Wong, Robert Schober, Wing Kwan Ng and Li-Chun Wang, 2017
10. Lanchao Liu, Zhu Han, Shuguang Cui, and Vincent Poor, "Big Data Processing for Smart Grid Security," *Big Data over Networks*, Cambridge University Press, edited by Alfred Hero, Jose' Moura, Tom Luo, and Shuguang Cui, 2014.

11. Ju Bin Song and Zhu Han, "Nonparametric Bayesian prediction of primary users' air traffics in cognitive radio networks," *Software-Defined and Cognitive Radio Technologies for Dynamic Spectrum Access and Management*, IGI-Global, editors: Naima Kaabouch and Wen Chen Hu, 2014.
12. Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, "Relay and Jammer Cooperation as a Coalitional Game," *Physical Layer Security in Wireless Communications*, Auerbach Publications, CRC Press, Taylor&Francis Group, editors: Sean Zhou, Lingyang Song, and Yan Zhang, 2013.
13. Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, "Ascending Clock Auction for Physical Layer Security," *Physical Layer Security in Wireless Communications*, Auerbach Publications, CRC Press, Taylor&Francis Group, editors: Sean Zhou, Lingyang Song, and Yan Zhang, 2013.
14. Tianyu Wang, Lingyang Song, Zhu Han, and Bingli Jiao, "Dynamic Resource Allocation in Cognitive Radio Relay Networks Using Sequential Auctions," *Mechanisms and Games for Dynamic Spectrum Allocation*, Cambridge University Press, editors: H. Vincent Poor, Holger Boche, Tansu Alpcan, and Michael Honig, 2013.
15. Walid Saad, Zhu Han, and Are Hjørungnes, "Coalitional Games for Cooperative Wireless Cellular Networks," *Cooperative Cellular Wireless Networks*, Cambridge University Press, editors: Ekram Hossain, Dong In Kim, and Vijay K. Bhargava, 2011.
16. Ninoslav Marina, Walid Saad, Zhu Han, and Are Hjørungnes, "Modeling Malicious Behavior in Cooperative Cellular Wireless Networks," *Cooperative Cellular Wireless Networks*, Cambridge University Press, editors: Ekram Hossain, Dong In Kim, and Vijay K. Bhargava, 2011.
17. Guan-Ming Su and Zhu Han, "Auction Based Resource Allocation for Cooperative Wireless Video Transmission," *Multimedia Analysis, Processing, and Communications*, Springer, editors: Weisi Lin, Dacheng Tao, Janusz Kacprzyk, Zhu Li, Ebroul Lzquierdo, and Haohong Wang, 2011.
18. Rajatha Raghavendra and Zhu Han, "Friend or Foe in OFDM Interference Channel," *Game Theory for Wireless Communication and Theory*, Auerbach Publications, Taylor & Francis Group, editors: Yan Zhang and Mohsen Guizani, 2011.
19. Jianwei Huang and Zhu Han, "Game Theory for Dynamic Spectrum Access," invited, *Cognitive Radio Networks: Architectures, Protocols and Standards*, Auerbach Publications, Taylor & Francis Group, editors: Yan Zhang, Jun Zheng and Hsiao-Hwa Chen, 2010.
20. Yan Sun and Zhu Han, "Trusted Cooperative Transmission: Turning a Security Weakness into Security Enhancement," *Securing Wireless Communications at the Physical Layer*, editors: Ruoheng Liu and Wade Trappe, Springer-Verlag, 2009.
21. Zhu Han and H. Vincent Poor, "Impact of Cooperative Transmission over Network Routing," *Cooperative Wireless Communications*, Auerbach Publications, Taylor and Francis Group, editors: Yan Zhang, Hsiao-Hwa Chen and Mohsen Guizani, 2009.
22. Zhu Han, "Degrees of Cooperation in Dynamic Spectrum Access for Distributed Cognitive Radios," invited, *Cognitive Wireless Communication Networks*, Springer, editors: Ekram Hossain and Vijay K. Bhargava, 2007.

Transaction/Magazine/Letter Publications

Published or Accepted

1. Di Zhou, Min Sheng, Jiaxin Wu, Jiandong Li, and Zhu Han, "Gateway Placement in Integrated Satellite-Terrestrial Networks: Supporting Communications and Internet of Remote Things," to appear *IEEE Journal of Internet of Things*.
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317. Yingyu Li, Yifang Zhu, Wotao Yin, Yang Liu, Guangming Shi, and Zhu Han, "Prediction of High Resolution Spatial-temporal Air Pollutant Map from Big Data Sources," *The 1st International Conference on Big Data Computing and Communications Big Data (BigCom2015)*, Taiyuan, China, August, 2015.
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324. Dong Wang, Bo Bai, Wei Chen, and Zhu Han, "Secure Green Communication for Amplify-and-Forward Relaying with Eavesdroppers," *IEEE International Conference on Communications*, London, UK, June, 2015.
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335. Joseph Kamto, Lijun Qian, Wei Li, and Zhu Han, "Biconnected Tree for Robust Data Collection in Advanced Metering Infrastructure," *IEEE Wireless Communications and Networking Conference*, New Orleans, LA, March 2015.
336. Ruizhou Ding, Tianyu Wang, Lingyang Song, Zhu Han, and Jianjun Wu, "Roadside-Unit Caching in Vehicular Ad Hoc Networks for Efficient Popular Content Delivery," *IEEE Wireless Communications and Networking Conference*, New Orleans, LA, March 2015.
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338. Lanchao Liu, Xianfu Chen, Mehdi Bennis, Guoliang Xue, and Zhu Han, "A Distributed ADMM Approach for Mobile Data Offloading in Software Defined Network," *IEEE Wireless Communications and Networking Conference*, New Orleans, LA, March 2015.
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341. Fahira Sangare, Ali Arab, Miao Pan, Lijun Qian, Suresh Khator, and Zhu Han, "RF Energy Harvesting for WSNs via Dynamic Control of Unmanned Vehicle Charging," *IEEE Wireless Communications and Networking Conference*, New Orleans, LA, March 2015.
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344. Ramy E. Ali, Fadel F. Digham, Karim G. Seddik, Mohammed Nafie, and Zhu Han, "A Probabilistic MAC for Cognitive Radio Systems with Energy Harvesting Nodes," *IEEE globalsip*, Atlanta, December, 2014.
345. Husheng Li and Zhu Han, "Communication Requirement for Distributed Statistical Machine Learning with Application in Waveform Cognition," *IEEE globalsip*, Atlanta, December, 2014.

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348. Nguyen H. Tran, Hoang Dai Tran, Long Bao Le, Zhu Han, and Choong Seon Hong, "Load Balancing and Pricing for Spectrum Access Control in Cognitive Radio Networks," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
349. Bidushi Barua, Zaheer Khan, Zhu Han, Matti Latva-aho, and Marcos Katz, "On the Selection of Best Devices for Cooperative Wireless Content Delivery," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
350. Lanchao Liu, Shaolei Ren, and Zhu Han, "Scalable Workload Management for Water Efficiency in Data Centers," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
351. Yawei Pang, Yanru Zhang, Yunan Gu, Miao Pan, Pan Li and Zhu Han, "Efficient Data Collection for Wireless Rechargeable Sensor Clusters in Harsh Terrains Using UAVs," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
352. Yong Xiao, Zhu Han, and Luiz A. DaSilva, "Opportunistic Relay Selection for Cooperative Energy Harvesting Communication Networks," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
353. Erte Pan, Miao Pan, Zhu Han, and Vernaldo Wright, "Mobile Trace Inference Based on Tensor Voting," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
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355. Yun Liao, Tianyu Wang, Lingyang Song, and Zhu Han, "Listen-and-Talk: Full-duplex Cognitive Radio Networks," *IEEE Global Communications Conference*, December, Austin, TX, 2014 **Best Paper Award**.
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357. Yunan Gu, Yanru Zhang, Miao Pan, and Zhu Han, "Cheating in Matching of Device to Device Pairs in Cellular Networks," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
358. Husheng Li and Zhu Han, "Distributed Source Coding for Controlling Cyber Physical Systems with Application in Smart Grids," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
359. Muhammad Ejaz Ahmed, Ju Bin Song, and Zhu Han, "Mitigating Malicious Attacks using Bayesian Nonparametric Clustering in Collaborative Cognitive Radio Networks," *IEEE Global Communications Conference*, December, Austin, TX, 2014.

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361. Huaqing Zhang, Mehdi Bennis, Luiz A. DaSilva, and Zhu Han, "Multi-leader Multi-follower Stackelberg Game among Wi-Fi, Small Cell and Macrocell Networks," *IEEE Global Communications Conference*, December, Austin, TX, 2014.
362. Huaqing Zhang, Fei Li, Niyato Dusit, Lingyang Song, Tao Jiang, and Zhu Han, "Zero-determinant Strategy in Power Control of Small Cell Network," invited, *IEEE International Conference on Communication Systems (ICCS)*, Macau, China, November 2014.
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364. Tian Zhang, Wei Chen, Zhu Han, and Zhigang Cao, "Electric Vehicle Charging Scheduling Under Local Renewable Energy and Stochastic Grid Power Price", *IEEE SmartGridComm*, Venice, Italy, October, 2014.
365. Dusit Niyato, Ping Wang, Peter Han Joo Chong, Zhu Han and Dong In Kim, "Optimal Energy Management Policy of a Mobile Cloudlet with Wireless Energy Charging", *IEEE SmartGridComm*, Venice, Italy, October, 2014.
366. Ali Arab, Eylem Tekin, Amin Khodaei, Suresh Khator, and Zhu Han, "Dynamic Maintenance Scheduling for Power Systems Incorporating Hurricane Effects", *IEEE SmartGridComm*, Venice, Italy, October, 2014.
367. Wenbo Wang, Andres, Kwasinski, and Zhu Han, "Power Allocation with Stackelberg Game in Femtocell Networks: A Self-Learning Approach," *IEEE International Conference on Sensing, Communication, and Networking (SECON)*, Singapore, July 2014.
368. Nguyen H. Tran, Shaolei Ren, Zhu Han, Sung Man Jang, Seung Il Moon, and Choong Seon Hong, "Demand Response of Data Centers: A Real-time Pricing Game between Utilities in Smart Grid," *USENIX Feedback Computing workshop*, Philadelphia, PA, June 2014.
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373. Yue Sun, Tianyu Wang, Lingyang Song, and Zhu Han, "Efficient Resource Optimization for Heterogeneous Smart-Building Networks," *IEEE International Conference on Communications*, Sydney, Australia, June 2014.
374. Hang Zhang, Tianyu Wang, Lingyang Song, and Zhu Han, "Radio Resource Allocation for Physical-Layer Security in Device to Device Underlay Communications," *IEEE International Conference on Communications*, Sydney, Australia, June 2014.
375. Xiaofei Wang, Min Chen, Zhu Han, Dapeng Wu, Taekyoung Kwon, "TOSS: Traffic Offloading by Social Network Service-Based Opportunistic Sharing in Mobile Social Networks," *the 33rd Annual IEEE International Conference on Computer Communications (INFOCOM)*, Toronto, Canada, April-May, 2014.
376. Walid Saad, Zhu Han, Rong, Zheng, Merouane Debbah, and H. Vincent Poor, "A College Admissions Game for Uplink User Association in Wireless Small Cell Networks," *the 33rd Annual IEEE International Conference on Computer Communications (INFOCOM)*, Toronto, Canada, April-May, 2014.
377. Hongliang Zhang, Lili Ma, Lingyang Song, and Zhu Han, "Wireless Device-to-Device Hypergraph Optimization," *IEEE INFOCOM, Student Activities*, Toronto, Canada, April-May, 2014.
378. Zijie Zheng, Tianyu Wang, Lingyang Song, Zhu Han, and Jianjun Wu, "Social-Aware Multi-File Dissemination in Device-to-Device Overlay Networks," *IEEE INFOCOM, Student Activities*, Toronto, Canada, April-May, 2014.
379. Siavash Bayat, Yonghui Li, Zhu Han, Mischa Dohler, and Branka Vucetic, "Distributed Data Aggregation in Machine-to-Machine Communication Networks Based on Coalitional Game," *IEEE Wireless Communications and Networking Conference*, Istanbul, Turkey, April 2014.
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383. Lanchao Liu, Qing Ling, and Zhu Han, "Decentralized Gauss-Newton Method For Nonlinear Least Squares On Wide Area Network," invited, *The 2nd Radio and Antenna Days of the Indian Ocean (RADIO)*, Mauritius, April 2014.
384. Ali Arab, Amin Khodaei, Zhu Han, and Suresh Khator, "Optimal Restoration Planning for Smart Grid under Natural Disaster," *2014 UT Energy Forum Texas Energy Research Challenge*, Austin, February, 2014.
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387. Mohammad Esmalifalak, Nam Tuan Nguyen, Rong Zheng, and Zhu Han, "Detecting Stealthy False Data Injection Using Machine Learning in Smart Grid," *IEEE Globe Communication Conference (Globecom)*, Atlanta, GA, December 2013.
388. Najmeh Forouzandehmehr, Samir M. Perlaza, Zhu Han, and H. Vincent Poor, "A Satisfaction Game for Heating, Ventilation and Air Conditioning Control of Smart Buildings," *IEEE Globe Communication Conference (Globecom)*, Atlanta, GA, December 2013.
389. Zaheer Khan, Marcos Katz, Zhu Han, Angeliki Alexiou and Luiz A. DaSilva, "Autonomous Opportunistic Spectrum Access Strategies: Benefits of Adaptive Strategies," *31ST Wireless World Research Forum Meeting*, Vancouver, Canada, October, 2013.
390. Lanchao Liu, Amin Khodaei, Wotao Yin, and Zhu Han, "A Distribute Parallel Approach for Big Data Scale Optimal Power Flow with Security Constraints," *IEEE SmartGridComm*, Vancouver, Canada, October 2013.
391. Qiumin Dong, Dusit Niyato, Ping Wang, and Zhu Han, "An Adaptive Scheduling of PHEV Charging: Analysis under Imperfect Data Communication," *IEEE SmartGridComm*, Vancouver, Canada, October 2013.
392. Zhenghao Zhang, Husheng Li, Ju Bin Song, Zhu Han, Gaoyong Luo, and Wenjing Hu, "Wireless Communication Aided Differential Relay Protection in Smart Grids: A Concerted Blitzkrieg," *IEEE SmartGridComm*, Vancouver, Canada, October 2013.
393. Husheng Li, Zhu Han, and Ju Bin Song, "Stabilizing Hybrid Data Traffics in Cyber Physical Systems with Case Study on Smart Grid," *IEEE SmartGridComm*, Vancouver, Canada, October 2013.
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396. Ali Arab, Amin Khodaei, Suresh Khator, Zhu Han, and Qifeng Ding, "Efficient Post-Hurricane Transmission Network Restoration to Minimize Customer Interruption," *IEEE Great Lakes Symposium on Smart Grid*, Chicago, IL, September, 2013.
397. Behrouz Maham, Walid Saad, Merouane Debbah, and Zhu Han, "Interference Analysis for Spatial Reused Cooperative Multihop Wireless Networks," *IEEE 2013 IEEE 22nd International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*, Lingdon, UK, September 2013.
398. Hongliang Zhang, Tianyu Wang, Lingyang Song, and Zhu Han, "Optimization of Joint Resource Allocation and Power Control for D2D Communications Networks,"

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399. Yanru Zhang, Erte Pan, Lingyang Song, Walid Saad, Zaher Dawy, and Zhu Han, "Social Network Enhanced Device-to-Device Communication Underlying Cellular Networks," *IEEE International Conference on Communications in China (ICCC), D2D Workshop*, Xi'an, China, August 2013.
 400. Samir M. Perlaza, Arsenia Chorti, H. Vincent Poor, and Zhu Han, "On the Impact of Network-State Knowledge on the Feasibility of Secrecy," *IEEE International Symposium on Information Theory (ISIT)*, Istanbul, Turkey, July 2013.
 401. Tamseel Mahmood Syed, Nghi H. Tran, Tuyen X. Tran, and Zhu Han, "Precoder Design for a Single-Relay Non-Orthogonal AF System based on Mutual Information," *The 9th IEEE International Wireless Communications and Mobile Computing Conference (IWCMC 2013)*, Cagliari, Italy, July 2013.
 402. Samir M. Perlaza, Arsenia Chorti, H. Vincent Poor, and Zhu Han, "On the Trade-offs between Network State Knowledge and Secrecy," invited, *2013 Global Wireless Summit*, Atlantic City, NJ, June 2013.
 403. Tina Mathews and Zhu Han, "USRP2 Implementation of Compressive Sensing Based Channel Estimation in OFDM," invited, *the Third International Conference on Communications and Information Technology (ICCIT-2013)*, Beirut, Lebanon, June 2013.
 404. Lanchao Liu, Mohammad Esmalifalak, and Zhu Han, "Detection of False Data Injection in Power Grid Exploiting Low Rank and Sparsity," *IEEE International Conference on Communications*, Budapest, Hungary, June 2013.
 405. Tian Zhang, Wei Chen, Zhu Han, and Zhigang Cao, "Coalitional Game Theoretic Approach for Cooperative Transmission in Vehicular Networks," *IEEE International Conference on Communications*, Budapest, Hungary, June 2013.
 406. Tianyu Wang, Lingyang Song, Zhu Han, Zhaohua Lu, and Liujun Hu, "Popular Content Distribution in Vehicular Networks using Coalition Formation Games," *IEEE International Conference on Communications*, Budapest, Hungary, June 2013.
 407. Feiran Wang, Chen Xu, Lingyang Song, Qun Zhao, Xiaoli Wang, and Zhu Han, "Energy-Aware Resource Allocation for Device-to-Device Underlay Communication," *IEEE International Conference on Communications*, Budapest, Hungary, June 2013.
 408. Mohammad Aghababaie Alavijeh, Behrouz Maham, Zhu Han, and Said Nader Esfahani, "Efficient Anti-Jamming Truthful Spectrum Auction among Secondary Users in Cognitive Radio Networks," *IEEE International Conference on Communications*, Budapest, Hungary, June 2013.
 409. Rongqing Zhang, Lingyang Song, Zhu Han, Xiang Cheng, and Bingli Jiao, "Distributed Resource Allocation for Device-to-Device Communications Underlying Cellular Networks," *IEEE International Conference on Communications*, Budapest, Hungary, June 2013.
 410. Qiumin Dong, Dusit Niyato, Ping Wang, and Zhu Han, "Deferrable Load Scheduling Optimization under Power Price Information Attacks in Smart Grid," *IEEE*

- Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
411. Nam Tuan Nguyen, Rong Zheng, and Zhu Han, "UMLI: An Unsupervised Mobile Locations Extraction Approach with Incomplete Data," *IEEE Wireless Communications and Networking Conference*, **Best Paper Award**, Shanghai, China, April 2013.
 412. Muhammad Ejaz Ahmed, Ju Bin Song, and Zhu Han, "Traffic Pattern-Based Reward Maximization for Secondary User in Dynamic Spectrum Access," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
 413. Chen Wang, Yuan Liu, Meixia Tao, Zhu Han, and Dong In Kim, "Stackelberg Game for Spectrum Reuse in the Two-Tier LTE Femtocell Network," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
 414. Yanbo Ma, Chen Wang, Meixia Tao, and Zhu Han, "Content-Aware Transmission with Delay Threshold in Heterogeneous Networks," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
 415. Feiran Wang, Lingyang Song, Zhu Han, Qun Zhao, and Xiaoli Wang, "Joint Scheduling and Resource Allocation for Device-to-Device Underlay Communication," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
 416. Tianyu Wang, Lingyang Song, Zhu Han, and Walid Saad, "Overlapping Coalitional Games for Collaborative Sensing in Cognitive Radio Networks," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
 417. Ziqiang Feng, Lingyang Song, Zhu Han, Dusit Niyato, and Xiaowu Zhao, "Cell Selection in Two-Tier Femtocell Networks with Open/Closed Access Using Evolutionary Game," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
 418. Zengfeng Zhang, Lingyang Song, Zhu Han, Walid Saad, and Zhaohua Lu, "Interference Management in Small Cell Networks: An Overlapping Coalitional Game Approach," *IEEE Wireless Communications and Networking Conference*, Shanghai, China, April 2013.
 419. Tianyu Wang, Lingyang Song, Zhu Han, Junfeng Zhang, and Xiaodan Zhang, "Dynamic Resource Allocation in Cognitive Radio Two-Way Relay Networks Using Sequential Auctions," invited *IEEE International Wireless Symposium*, Beijing, April 2013.
 420. Ting Ning, Zhipeng Yang, Hongyi Wu, and Zhu Han, "Self-Interest-Drive Incentives for Ad Dissemination in Autonomous Mobile Social Networks," The 32nd IEEE International Conference on Computer Communications, INFOCOM, Turin, Italy, April 2013.
 421. Rong Zheng, Thanh Le, and Zhu Han, "Approximate Online Learning for Passive Monitoring of Multi-channel Wireless Networks," The 32nd IEEE International Conference on Computer Communications, INFOCOM, Turin, Italy, April 2013.
 422. Tian Zhang, Wei Chen, Zhu Han, and Zhigang Cao, "A Cross-Layer Perspective on Energy Harvesting Aided Green Communications over Fading Channels," *2013 IEEE INFOCOM Workshop on Communications and Control for Smart Energy Systems*, Turin, Italy, April 2013.

423. Lanchao Liu and Zhu Han, "Scalable Sparse Optimization for Big Power Grid Data," *NSF Workshop on Big Data From Signal Processing to Systems Engineering*, Arlington, VA, March, 2013.
424. Chen Xu, Lingyang Song, Zhu Han, Do Li, and Bingli Bao, "Resource Allocation Using A Reverse Iterative Combinatorial Auction for Device-to-Device Underlay Cellular Networks," *IEEE Globe Communication Conference*, Anaheim, CA, December 2012.
425. Nam Tuan Nguyen, Yichuan Wang, Husheng Li, Xin Liu and Zhu Han, "Extracting Typical Users' Moving Patterns Using Deep Learning," *IEEE Globe Communication Conference*, Anaheim, CA, December 2012.
426. Mohammad Esmalifalak, Ge Shi, Zhu Han, and Lingyang Song, "Attack Against Electricity Market-Attacker and Defender Gaming," *IEEE Globe Communication Conference*, Anaheim, CA, December 2012.
427. Arsenia Chorti, Samir M. Perlaza, Zhu Han, and H. Vincent Poor, "Physical Layer Security in Wireless Networks with Passive and Active Eavesdroppers," *IEEE Globe Communication Conference*, Anaheim, CA, December 2012.
428. Samir M. Perlaza, Dusit Niyato, Zhu Han, and Vincent Poor, "On the Decentralized Management of Scrambling Codes in Small Cell Networks," invited, *IEEE Singapore International Conference on Communication Systems (ICCS)*, Singapore, November 2012.
429. Samir M. Perlaza, H. Vincent Poor, and Zhu Han, "Learning Efficient Satisfaction Equilibria via Trial and Error," 2012 Conference Record of the Forty Sixth Asilomar Conference on Signals, Systems and Computers (ASILOMAR), Pacific Grove, CA, November, 2012.
430. Yi Huang, Lifeng Lai, Husheng Li, Wei Chen, and Zhu Han, "Online Quickest Multiarm Bandit Algorithm for Distributive Renewable Energy Resource," *IEEE International Conference on Smart Grid Communications, Smartgridcomm*, **Best Paper Award**, Tainan, October 2012.
431. Yifan Li, Ran Wang, Ping Wang, Dusit Niyato, Walid Saad, and Zhu Han, "Resilient PHEV Charging Policies under Price Information Attacks," *IEEE International Conference on Smart Grid Communications, Smartgridcomm*, Tainan, October 2012.
432. Chen Wang, Meixia Tao, and Zhu Han, "Partition Function Game for Rate Optimization in Random Interference Networks," *Fourth International Conference on Wireless Communications and Signal Processing*, Huangshan City, China, October 2012.
433. Feiran Wang, Chen Xu, Lingyang Song, and Zhu Han, "Energy-Efficient Radio Resource and Power Allocation for Device-to-Device Communication Underlying Cellular Networks," *Fourth International Conference on Wireless Communications and Signal Processing*, **Best Paper Award & WCSP 10-Year Anniversary Excellent Paper Award**, Huangshan City, China, October 2012.
434. Jun Deng, Rongqing Zhang, Lingyang Song, Zhu Han, Guang Yang, and Bingli Jiao, "Joint Power Control and Subchannel Allocation for OFDMA Femtocell Networks Using Distributed Auction Game," *Fourth International Conference on Wireless Communications and Signal Processing*, Huangshan City, China, October 2012.

435. Xiaofei Wang, Min Chen, Zhu Han, Ted “Taekyoung” Kwon, and Yanghee Choi, “Content Dissemination by Pushing and Sharing in Mobile Cellular Networks: An Analytical Study,” *the 9th IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS)*, Las Vegas, NV, October 2012.
436. Samir M. Perlaza, Ravi Tandon, H. Vincent Poor, and Zhu Han, “The Nash Equilibrium Region of the Linear Deterministic Interference Channel with Feedback,” *Allerton Conference on Communication, Control, and Computing*, Allerton, IL, Sep.-Oct. 2012.
437. Ziqiang Feng, Jun Deng, Lingyang Song, Zhu Hany, Guang Yang, and Bingli Jiao, “Joint Access Control and Subchannel Allocation for OFDMA Femtocell Network Using a Truthful Mechanism,” *International Workshop on Practical Issues and Applications in Next Generation Wireless Networks*, in conjunction with ACM MOBICOM 2012, Istanbul, Turkey, August 2012.
438. Tianyu Wang, Lingyang Song, Zhu Han, and Bingli Jiao, “Popular Content Distribution in CR-VANETs with Joint Spectrum Sensing and Channel Access,” *Chinacom*, Kunming, China, August 2012 **Best Student Paper Award**.
439. Walid Saad, Zhu Han, and H. Vincent Poor, “On the Physical Layer Security of Backscatter RFID Systems,” invited, *The Ninth International Symposium on Wireless Communication Systems*, Paris, France, August 2012.
440. Nam Tuan Nguyen, Yichuan Wang, Xin Liu, Rong Zheng, and Zhu Han, “A Non-parametric Bayesian Approach for Opportunistic Data Transfer in Cellular Networks,” invited, *The 7th International Conference on Wireless Algorithms, Systems, and Applications*, Yellow Mountains, China, August 2012.
441. Tianyu Wang, Lingyang Song, and Zhu Han, “Popular Content Distribution in CR-VANETs with Sensing-Throughput Tradeoff,” *First IEEE International Conference on Communications in China (ICCC)*, Beijing, China, August 2012.
442. Y. C. Shiu, J. S. H. Tsai, S. M. Guo, L. S. Shieh, and Z. Han, “Fault-Tolerant Tracker For Interconnected Large-Scale Nonlinear Systems With Input Constraint,” *4th International Interdisciplinary Chaos Symposium on Chaos and Complex Systems*, Antalya, Turkey, May 2012.
443. Francois Meriaux, Samir M. Perlaza, Samson Lasaulce, Zhu Han, and Vincent Poor, “On the Achievability of Efficient Satisfaction Equilibria in Self-Configuring Networks,” *3rd International Conference on Game Theory for Networks (Gamenets)*, Vancouver, Canada, May 2012.
444. Zhou Yuan, Ju Bin Song, and Zhu Han, “Network Formation Game for Interference Minimization Routing in Cognitive Radio Mesh Networks,” invited, *3rd International Conference on Game Theory for Networks (Gamenets)*, Vancouver, Canada, May 2012.
445. Quanyan Zhu, Zhu Han, and Tamer Basar, “A Differential Game Approach to Distributed Demand Side Management in Smart Grid,” *IEEE International Conference on Communications*, Ottawa, Canada, June 2012.
446. Siavash Bayat, Raymond Hall Yip Louie, Zhu Han, Yonghui Li, and Branka Vucetic, “Multiple Operator and Multiple Femtocell Networks: Distributed Stable Matching,” *IEEE International Conference on Communications*, Ottawa, Canada, June 2012.

447. Muhammad Ejaz Ahmed, Ju Bin Song, Nam Tuan Nguyem, and Zhu Han, "Non-parametric Bayesian Identification of Primary Users' Payloads in Cognitive Radio Networks," *IEEE International Conference on Communications*, Ottawa, Canada, June 2012.
448. Lanchao Liu, Husheng Li, and Zhu Han, "Sampling Spectrum Occupancy Data over Random Fields: A Matrix Completion Approach," *IEEE International Conference on Communications*, Ottawa, Canada, June 2012.
449. Tianyu Wang, Lingyang Song, Zhu Han, Xiang Cheng, and Bingli Jiao, "Power Allocation using Vickrey Auction and Sequential First-Price Auction Games for Physical Layer Security in Cognitive Relay Networks," *IEEE International Conference on Communications*, Ottawa, Canada, June 2012.
450. Chen Xu, Lingyang Song, Zhu Han, Qun Zhao, Xiaoli Wang, and Bingli Jiao, "Interference-Aware Resource Allocation for Device-to-Device Communications as an Underlay Using Sequential Second Price Auction," *IEEE International Conference on Communications*, Ottawa, Canada, June 2012.
451. Mohammad Esmalifalak, Zhu Han, and Lingyang Song, "Effect Of Stealthy Bad Data Injection On Network Congestion In Market Based Power System," *IEEE Wireless Communications and Networking Conference*, Paris, France, April 2012, (**Best Paper Award**).
452. Siavash Bayat, Raymond Hall Yip Louie, Zhu Han, Yonghui Li, and Branka Vucetic, "Distributed Stable Matching Algorithm for Physical Layer Security with Multiple Source-Destination Pairs and Jammer Nodes," *IEEE Wireless Communications and Networking Conference*, Paris, France, April 2012.
453. Dusit Niyato, Ping Wang, Ekram Hossain, Walid Saad, and Zhu Han, "Game Theoretic Modeling of Cooperation among Service Providers in Mobile Cloud Computing Environments," *IEEE Wireless Communications and Networking Conference*, Paris, France, April 2012, (**Best Paper Award**).
454. Yifan Li, Rakpong Kaewpuang, Ping Wang, Dusit Niyato and Zhu Han, "An Energy Efficient Solution: Integrating Plug-In Hybrid Electric Vehicle in Smart Grid with Renewable Energy," *IEEE INFOCOM Workshop on Green Networking and Smart Grids*, March 2012.
455. Hannan Ma, Husheng Li, and Zhu Han, "A Framework of Frequency Oscillation in Power Grid: Epidemic Propagation over Social Networks," *IEEE INFOCOM Workshop on Green Networking and Smart Grids*, March 2012.
456. Hung Khanh Nguyen, Ju Bin Song, and Zhu Han, "Demand Side Management to Reduce Peak-to- Average Ratio using Game Theory in Smart Grid," *IEEE INFOCOM Workshop on Green Networking and Smart Grids*, March 2012.
457. Husheng Li and Zhu Han, "Distributed Scheduling of Wireless Communications for Voltage Control in Micro Smart Grid", SG-COMNETs workshop in *IEEE Globe Communication Conference (Globecom)*, Houston, TX, December 2011.
458. Husheng Li and Zhu Han, "Manipulating the Electricity Power Market via Jamming the Price Signaling in Smart Grid," SG-COMNETs workshop in *IEEE Globe Communication Conference (Globecom)*, Houston, TX, December 2011.

459. Jingchao Chen, Lingyang Song, Zhu Han, and Bingli Jiao, "Joint Relay and Jammer Selection for Secure Decode-and-Forward Two-Way Relay Communications," *IEEE Globe Communication Conference (Globecom)*, Houston, TX, December 2011.
460. Lanchao Liu, Zhu Han, Zhiqiang Wu, and Lijun Qian, "Collaborative Compressive Sensing based Dynamic Spectrum Sensing and Mobile Primary User Localization in Cognitive Radio Networks," *IEEE Globe Communication Conference (Globecom)*, Houston, TX, December 2011.
461. Huy Nguyen, Nam Nguyen, Guanbo Zheng, Zhu Han, and Rong Zheng, "Binary Blind Identification of Wireless Transmission Technologies for Wide-band Spectrum Monitoring," *IEEE Globe Communication Conference (Globecom)*, Houston, TX, December 2011.
462. Xue Li, Steven Hong, Zhu Han, and Zhiqiang Wu, "Bayesian Compressed Sensing Based Dynamic Joint Spectrum Sensing and Primary User Localization for Dynamic Spectrum Access," *IEEE Globe Communication Conference (Globecom)*, Houston, TX, December 2011.
463. Husheng Li, Zhu Han, and Zhenghao Zhang, "Communication over Random Fields: A Statistical Framework for Cognitive Radio Networks," *IEEE Globe Communication Conference (Globecom)*, Houston, TX, December 2011.
464. Tianyu Wang, Lingyang Song, Zhu Han, Zhongshan Zhang, and Bingli Jiao, "A Feedback Rate Control Game using Sequential Second Price Auction for Channel State Information and Intercell Interference in Wireless Networks," invited, *2011 International Conference on Wireless Communications & Signal Processing: WCSP*, November 2011.
465. Quanyan Zhu, Walid Saad, Zhu Han, H. Vincent Poor, and Tamer Basar, "Eavesdropping and Jamming in Next-Generation Wireless Networks: a Game Theoretic Approach," *the 2011 IEEE Military Communications Conference*, November 2011.
466. Mohammad Esmalifalak, Huy Nguyen, Rong Zheng, and Zhu Han, "Stealth False Data Injection using Independent Component Analysis in Smart Grid," *IEEE International Conference on Smart Grid Communications, Smartgridcomm*, October 2011.
467. Walid Saad, Zhu Han, H. Vincent Poor, and Tamer Basar, "A Noncooperative Game for Double Auction-Based Energy Trading between PHEVs and Distribution Grids," *IEEE International Conference on Smart Grid Communications, Smartgridcomm*, October 2011.
468. Husheng Li, Zhu Han, Lifeng Lai, Robert Caiming Qiu, and Depeng Yang, "Efficient and Reliable Multiple Access for Advanced Metering in Future Smart Grid," *IEEE International Conference on Smart Grid Communications, Smartgridcomm*, October 2011.
469. Husheng Li and Zhu Han, "Synchronization of Power Networks Without and With Communication Infrastructures," *IEEE International Conference on Smart Grid Communications, Smartgridcomm*, October 2011.
470. Manav Bhatnagar, Ankur Bansal, Are Hjørungnes, and Zhu Han, "Maximum-Likelihood Decoding in Decode-and-Forward Based MIMO Cooperative Commu-

- nication Systems,” *the 45th Asilomar Conference on Signals, Systems and Computers*, October 2011.
471. Lei Jiang, Zhu Han, Maria-Angeles Vazquez-Castro, and Are Hjørungnes, “Multi-beam SATCOM Systems Design with Physical Layer Security,” invited, *2011 IEEE International Conference on Ultra-Wideband*, September 2011.
 472. Rongqing Zhang, Lingyang Song, Zhu Han, Zhongshan Zhang, and Bingli Jiao, “Joint subcarrier and power allocation for multiuser OFDM systems using distributed auction game,” *the 6th international conference on Wireless algorithms, systems, and applications*, Chengdu, China, August, 2011.
 473. Tianyu Wang, Rongqing Zhang, Lingyang Song, Zhu Han, Haopeng Li, and Bingli Jiao, “Power Allocation for Two-Way Relay System Based on Sequential Second Price Auction,” invited, *The Third International Conference on Ubiquitous and Future Networks*, June 2011.
 474. Walid Saad, Zhu Han, and H. Vincent Poor, “Coalitional Game Theory for Cooperative Micro-Grid Distribution Networks,” *IEEE International Conference on Communications*, Workshop on Smart Grid Communications, Kyoto, Japan, June 2011.
 475. Jia Meng, Yingying Li, Nam Nguyen, Wotao Yin, and Zhu Han, “High Resolution OFDM Channel Estimation with Low Speed ADC using Compressive Sensing,” *IEEE International Conference on Communications*, Kyoto, Japan, June 2011.
 476. Lingyang Song, Zhu Han, Qihao Li, and Bingli Jiao, “Feedback Control Game for Channel State Information in Wireless Networks,” *IEEE International Conference on Communications*, Kyoto, Japan, June 2011.
 477. Jingchao Chen, Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, “Joint Relay and Jammer Selection for Secure Two-way Relay Networks,” *IEEE International Conference on Communications*, Kyoto, Japan, June 2011.
 478. Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, “Distributed Coalition Formation of Relay and Friendly Jammers for Secure Cooperative Networks,” *IEEE International Conference on Communications*, Kyoto, Japan, June 2011.
 479. Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, “Relay and Jammer Cooperation as a Coalitional Game in Secure Cooperative Wireless Networks,” invited, *1st International ICST Workshop on Secure Wireless Networks (SECURENETS)*, May 2011.
 480. Yingying Li, Zhu Han, Wei-Chuan Shih and Wotao Yin, “Oil spill sensor using multispectral infrared imaging via l1 minimization,” *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Prague, Czech Republic, May 2011.
 481. Tianyu Wang, Lingyang Song, Zhu Han, and Bingli Jiao, “Improve Secure Communications in Cognitive Two-Way Relay Networks using Sequential Second Price Auction,” *Fifth IEEE International Symposium on New Frontiers in Dynamic Spectrum Access Networks 2010 (DySPAN 2011)*, Aachen, Germany, May 2011.
 482. Walid Saad, Zhu Han, and H. Vincent Poor, “A Game Theoretic Approach for Multi-hop Power Line Communications,” invited, *2nd International ICST Conference on Game Theory for Networks (Gamenet)*, Shanghai, China, April 2011.

483. Shuhang Liu, Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, "Enforce Truth-Telling in Wireless Relay Networks for Secure Communication," *IEEE International Workshop on Security in Computers, Networking and Communications (SCNC)*, INFOCOM Workshop, Shanghai, China, April 2011.
484. Rongqing Zhang, Lingyang Song, Zhu Han, and Bingli Jiao, "Improve Physical Layer Security in Cooperative Wireless Network using Distributed Auction Games," *the 2011 International Workshop on Cognitive and Cooperative Networks*, INFOCOM Workshop, Shanghai, China, April 2011.
485. Nam Tuan Nguyen, Guanbo Zheng, Zhu Han and Rong Zheng, "Device Fingerprinting to Enhance Wireless Security using Nonparametric Bayesian Method," *IEEE Annual IEEE Conference on Computer Communications INFOCOM*, Shanghai, China, April 2011.
486. Wotao Yin, Zaiwen Wen, Shuyi Li, Jia (Jasmine) Meng, and Zhu Han, "Dynamic Compressive Spectrum Sensing for Cognitive Radio Networks," *the 45th Annual Conference on Information Sciences and Systems (CISS)*, Baltimore, MD, March 2011.
487. Yi Huang, Husheng Li, Kristy A. Campbell, and Zhu Han, "Defending False Data Injection Attack On Smart Grid Network Using Adaptive CUSUM Test," *the 45th Annual Conference on Information Sciences and Systems (CISS)*, Baltimore, MD, March 2011.
488. Zhou Yuan, Dusit Niyato, Husheng Li, and Zhu Han, "Defense Against Primary User Emulation Attacks Using Belief Propagation of Location Information in Cognitive Radio Networks," *IEEE Wireless Communications and Networking Conference*, Cancun, Mexico, March 2011.
489. Dusit Niyato, Ping Wang, Walid Saad, Zhu Han, and Are Hjorungnes, "Coalition Formation Games for Relay Transmission: Stability Analysis under Uncertainty," *IEEE Wireless Communications and Networking Conference*, Cancun, Mexico, March 2011.
490. Fabian Rozario, Zhu Han, and Dusit Niyato, "Optimization of Non-cooperative P2P Network from the Game Theory Point of View," *IEEE Wireless Communications and Networking Conference*, Cancun, Mexico, March 2011.
491. Dusit Niyato, Ping Wang, Zhu Han, and Ekram Hossain, "Impact of Packet Loss on Power Demand Estimation and Power Supply Cost," *IEEE Wireless Communications and Networking Conference*, Cancun, Mexico, March 2011.
492. Wenkai Wang, Yan Sun, Husheng Li, and Zhu Han, "Cross-layer Attack and Defense in Cognitive Radio Networks," *IEEE Globe Communication Conference (Globecom)*, Miami, FL, Nov.-Dec. 2010.
493. Walid Saad, Zhu Han, Tamer Basar, Merouane Debbah, and Are Hjorungnes, "A Coalition Formation Game in Partition Form for Peer-to-Peer File Sharing Networks," *IEEE Globe Communication Conference (Globecom)*, Miami, FL, Nov.-Dec. 2010.
494. Rongqing Zhang, Lingyang Song, Zhu Han, Bingli Jiao, and Merouane Debbah, "Physical Layer Security for Two Way Relay Communications with Friendly Jammers," *IEEE Globe Communication Conference (Globecom)*, Miami, FL, Nov.-Dec. 2010.

495. Dusit Niyato, Zhu Han, Walid Saad, and Are Hjørungnes, “A Controlled Coalitional Game for Wireless Connection Sharing and Bandwidth Allocation in Mobile Social Networks,” *IEEE Globe Communication Conference (Globecom)*, Miami, FL, Nov.-Dec. 2010.
496. Quanyan Zhu, Zhou Yuan, Ju Bin Song, Zhu Han, and Tamer Basar, “Dynamic Interference Minimization Routing Game for On-Demand Cognitive Pilot Channel,” *IEEE Globe Communication Conference (Globecom)*, Miami, FL, Nov.-Dec. 2010.
497. Behrouz Maham, Walid Saad, Merouane Debbah, Zhu Han, and Are Hjørungne, “Efficient Cooperative Protocols for General Outage-Limited Multihop Wireless Networks,” invited, in proceeding of *the 21st Annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*, Istanbul, Turkey, September 2010.
498. Behrouz Maham, Are Hjørungne, and Zhu Han, “Multihop transmission with interference using spatial reused space-time coded cooperative-routing,” *5th Advanced satellite multimedia systems conference (asma) and the 11th signal processing for space communications workshop (spsc)*, September 2010.
499. Dan Xu, Xin Liu, and Zhu Han, “A Two-Tier Market for Decentralized Dynamic Spectrum Access in Cognitive Radio Networks,” *Seventh Annual IEEE Communications Society Conference on Sensor, Mesh, and Ad Hoc Communications and Networks (SECON)*, Boston, MA, June 2010.
500. Zhifeng Luo, Zhu Han, Albert K. Wong, and Shuisheng Qiu, “Relay-Assisted Partial Packet Recovery with IDMA Method in CDMA Wireless Network,” *the 6th International Wireless Communications and Mobile Computing Conference (IWCMC)*, Caen, France, Jun.-Jul. 2010.
501. Rajatha Raghavendra, Hao Zou, Mohamad Charafeddine, Zhu Han, and John M. Cioffi, “Low Complexity Multi-user Rate Region Maximization for Frequency-Selective Interference Channel,” invited, *the 6th International Wireless Communications and Mobile Computing Conference (IWCMC)*, Caen, France, Jun.-Jul. 2010.
502. Husheng Li and Zhu Han, “Queuing Analysis of Dynamic Spectrum Access Subject to Interruptions from Primary Users,” *the 5th International Conference on Cognitive Radio Oriented Wireless Networks and Communications (Crowncom)*, Cannes, France, June 2010.
503. Huy Nguyen, Rong Zheng, and Zhu Han, “Binary is Good: A Binary Inference Framework for Primary User Separation in Cognitive Radio Networks,” invited, *the 5th International Conference on Cognitive Radio Oriented Wireless Networks and Communications (Crowncom)*, Cannes, France, June 2010.
504. Husheng Li and Zhu Han, “Blind Dogfight in Spectrum: Combating Primary User Emulation Attacks in Cognitive Radio Systems with Unknown Channel Statistics,” *IEEE International Conference on Communications*, Capetown, South Africa, May 2010.
505. Dapeng Li, Jing Liu, Youyun Xu, Xinbing Wang, and Zhu Han, “A Market Game for Dynamic Multi-Band Sharing in Cognitive Radio Networks,” *IEEE International Conference on Communications*, Capetown, South Africa, May 2010.

506. Quanyan Zhu, Husheng Li, Zhu Han, and Tamer Basar, "A Stochastic Game Model for Jamming in Multi-channel Cognitive Radio Systems," *IEEE International Conference on Communications*, Capetown, South Africa, May 2010.
507. Quanyan Zhu, Zhu Han, and Tamer Basar, "No-Regret Learning in Collaborative Spectrum Sensing with Malicious Nodes," *IEEE International Conference on Communications*, Capetown, South Africa, May 2010.
508. Husheng Li and Zhu Han, "Catching Attacker(s) for Collaborative Spectrum Sensing in Cognitive Radio Systems: An Abnormality Detection Approach," *Fourth IEEE International Symposium on New Frontiers in Dynamic Spectrum Access Networks 2010 (DySPAN 2010)*, Singapore, Apr. 2010.
509. Husheng Li and Zhu Han, "Competitive Spectrum Access in Cognitive Radio Networks: Graphical Game and Learning," *IEEE Wireless Communications and Networking Conference*, Sydney, Australia, Apr. 2010.
510. Song Gao, Lijun Qian, Dhadesugoor. R. Vaman, and Zhu Han, "Distributed Cognitive Sensing for Time Varying Channels: Exploration and Exploitation," *IEEE Wireless Communications and Networking Conference*, Sydney, Australia, Apr. 2010.
511. Zhou Yuan, Ju Bin Song, and Zhu Han, "Interference Minimization Routing and Scheduling in Cognitive Radio Wireless Mesh Networks," *IEEE Wireless Communications and Networking Conference*, Sydney, Australia, Apr. 2010.
512. Husheng Li and Zhu Han, "Collaborative Spectrum Sensing with A Stranger: Trust, or Not to Trust?," *IEEE Wireless Communications and Networking Conference*, Sydney, Australia, Apr. 2010.
513. Walid Saad, Zhu Han, Tamer Basar, Are Hjørungnes, and Ju Bin Song, "Hedonic Coalition Formation Games for Secondary Base Station Cooperation in Cognitive Radio Networks," *IEEE Wireless Communications and Networking Conference*, Sydney, Australia, Apr. 2010.
514. Wei Zhang and Zhu Han, "Opportunistic Feedback in Collaborative Spectrum Sensing for Cognitive Radio," *IEEE Wireless Communications and Networking Conference*, Sydney, Australia, Apr. 2010.
515. Jia Meng, Wotao Yin, Husheng Li, Ekram Houssain, and Zhu Han, "Collaborative Spectrum Sensing from Sparse Observations Using Matrix Completion for Cognitive Radio Networks," *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Dallas, TX, Mar. 2010.
516. Zhu Han, Ninoslav Marina, Mérouane Debbah, and Are Hjørungnes, "Improved Wireless Secrecy Rate using Distributed Auction Theory," *The 6th International Conference on Mobile Ad-hoc and Sensor Networks*, Wuyishang, China, Dec. 2009.
517. Walid Saad, Zhu Han, Tamer Basar and Are Hjørungnes, "Network Formation Games for Wireless Multi-hop Networks in the Presence of Eavesdroppers," invited paper, *Third International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP09)*, Aruba, Dec. 2009.
518. Wenkai Wang, Husheng Li, Yan Sun, and Zhu Han, "CatchIt: Detect Malicious Nodes in Collaborative Spectrum Sensing," *IEEE Globe Communication Conference*, Hanolulu, Hawaii, Nov.-Dec. 2009.

519. Husheng Li and Zhu Han, "Dogfight in Spectrum: Jamming and Anti-Jamming in Multichannel Cognitive Radio Systems," *IEEE Globe Communication Conference*, Hanolulu, Hawaii, Nov.-Dec. 2009.
520. Walid Saad, Quanyan Zhu, Tamer Basar, Zhu Han, and Are Hjørungnes, "Hierarchical Network Formation Games in the Uplink of Multi-Hop Wireless Networks," *IEEE Globe Communication Conference*, Hanolulu, Hawaii, Nov.-Dec. 2009.
521. Jia Meng, Javad Ahmadi-Shokouh, Husheng Li, Earl Joe Charlson, Zhu Han, Sima Noghianian, and Ekram Hossain, "Sampling Rate Reduction for 60 GHz UWB Communication using Compressive Sensing," *Asilomar Conference on Signals, Systems & Computers*, Pacific grove, CA, Nov. 2009.
522. Walid Saad, Zhu Han, Tamer Basar, and Are Hjørungnes, "Coalitional Games for Distributed Eavesdroppers Cooperation in Wireless Networks," *the Third International Workshop on Game Theory in Communication Networks, Gamecomm09*, Pisa, Italy, Oct. 2009.
523. Zhu Han, Rong Zheng, and H. Vincent Poor, "Repeated Auctions with Learning for Spectrum Access in Cognitive Radio Networks," invited, *Allerton Conference on Communication, Control, and Computing*, Allerton, IL, Sep.-Oct. 2009.
524. Ju Bin Song, Ki Hwan Lee, and Zhu Han, "Joint Algorithm of Scheduling and Network Flow in Cognitive Radio Wireless Mesh Networks," *IEEE International Conference on Systems, Man and Cybernetics*, San Antonio, Oct. 2009.
525. Lun Dong, Zhu Han, Athina P. Petropulu and H. Vincent Poor, "Cooperative Jamming for Wireless Physical Layer Security," in Proceedings of *IEEE Workshop on Statistical Signal Processing*, Cardiff, Wales, U.K. Sep. 2009.
526. Zhifeng Luo, Deniz Gurkan, Zhu Han, Albert K. Wong, and Shuisheng Qiu, "Cooperative Communication based on IDMA," in Proceedings of *the 5th International Conference on Wireless Communications, Networking and Mobile Computing*, Beijing, China, Sep. 2009.
527. Walid Saad, Zhu Han, Mérouane Debbah, Are Hjørungnes, and Tamer Basar, "Physical Layer Security: Coalitional Games for Distributed Cooperation," in Proceedings of *7th International Symposium on Modeling and Optimization in Mobile, Ad Hoc, and Wireless Networks, (WiOpt09)*, South Korean, June 2009. (**Best Paper Award**)
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HOBBY

- North Pole Marathon, April 2012, the reason why the Chinese national flag waving first time in this event.
- First Chinese to Finish Seven Marathons in Seven Continents. First Chinese in Grand Slam Marathon Club (7 Continent Marathons plus North Pole Marathon).
- Half Ironman, swim (1.9 km), bike (90 km), run (22.1 km), IRONMAN 70.3 Texas, Galveston, April 2016.
- North American Chinese Soccer Tournament, Grand National Champion, New Brunswick, New Jersey, May 1999. Member of Team Maryland Hunter.
- North American Chinese Soccer Tournament, South Champion, San Antonio, May 2018. Member of Team Tang Dynasty.
- 67 Countries Visited. Highest Point: Summit of Kilimanjaro, 5,895m. Lowest Point: Dead Sea, -417m. North Most Point: North Pole, 90°0'0"N. South Most Point: Southern Ellsworth Mountains at Union Glacier, Antarctica, 79°46'.