

Tongtong Li

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Professional Experience

- 7/2020–present, *Professor*, Department of Electrical and Computer Engineering, Michigan State University.
- 7/2009–6/2020, *Associate Professor*, Department of Electrical and Computer Engineering, Michigan State University.
- 8/2002–6/2009, *Assistant Professor*, Department of Electrical and Computer Engineering, Michigan State University.
- 9/2000–7/2002, *Member of Technical Staff*, Network Communications Lab, Bell Labs., Lucent Technologies, Inc.

Education

- Ph.D. Electrical and Computer Engineering, Auburn University, 2000
- M.S. Electrical and Computer Engineering, Auburn University, 1998
- Ph.D. Mathematics, Zhongshan University, 1995
- M.S. Mathematics, Shaanxi Normal University, 1992
- B.S. Mathematics, Xinjiang Agricultural University, 1989

Research Interests and Expertise

- Wireless communications and networking
- Computational Neuroscience – brain network modeling and analysis
- Cyber-physical systems and Internet of things (IoT)
- Wireless security – physical layer and upper layers
- Digital signal processing, statistical signal processing
- Information theory – Physical layer and network layer

Teaching

- ECE 201, Circuits and Systems, I.
- ECE 202, Circuits and Systems, II.
- ECE 457, Communication Systems.
- ECE 865, Analog and Digital Communications.

- ECE 869, Wireless Communications and Networking.

Also served as Facilitator or Faculty Mentor for

- EGR 393, Engineering Cooperative Education
- ECE 480, Capstone Senior Design Projects

Academic Advising

1. Weiguo Liang, Ph.D., Dissertation: *Blind multiuser detection of DS-CDMA signals over frequency-selective fading channels*, December 2004, now with Nokia.
2. Huahui Wang, Ph.D., Dissertation: *Advanced Approaches in Information Transmission and Access Control for Wireless Communication Networks*, December 2006, now with AT&T Shannon Laboratory.
3. Qi Ling, Ph.D., Dissertation: *Secure Communication System Design for Wireless Networks*, December 2007, now with Google, CA. (co-advised with Dr. Jian Ren).
4. Leonard Lightfoot, Ph.D., Dissertation: *Space-Time Coding and Its Applications in Efficient and Jamming Resistant Wireless Communications*, May 2010, now with AFRL at Ohio.
5. Lei Zhang, Ph.D., Dissertation: *Spectrally Efficient Anti-jamming System Design in Wireless Networks*, December 2011, now with with Marvell at CA.
6. Mai Abdelhakim, Ph.D., Dissertation: *Reliable and Efficient Communications in Wireless Sensor Networks*, graduate in May 2014. now an Assistant Professor at University of Pittsburgh.
7. Tianlong Song, Ph.D., Dissertation Title: *Effective and Secure System Design in Wireless Communications*, graduated in Dec. 2015, now with Zillow Inc.
8. Ahmed Alahmadi, Ph.D., Dissertation Title: *Secure And Efficient Spectrum Sharing And QoS Analysis In OFDM-Based Heterogeneous Wireless Networks*, graduated in Dec.2016, now an Assistant Professor at Taibah University.
9. Zhe Wang, Ph.D., Dissertation Title: *Brain Connectivity Analysis using Information Theory and Statistical Analysis*, graduated in May 2017, now with Microsoft.
10. Yuan Liang, Ph.D., Dissertation Title: *Reliable 5G System Design and Networking*, graduated in May 2019, now with Facebook.
11. Leonard Lightfoot, M.S., Thesis: *Security protocol design for wireless sensor networks*, August 2006.
12. Xiaochen Tang, M.S., Thesis: *Secure Communication System Design for Smart Grid*, August 2012 (Co-advised with Dr. Jian Ren), now with Juniper Networks.
13. Ahmed Alahmadi, M.S., Thesis: *Combating Primary User Emulation Attack in Cognitive Networks*, graduated in May 2014.
14. Xie He, M.S., graduated in Dec. 2015.
15. Kun Li, MS student, graduated in May 2016.

Institutional Services

- Member, College Tenure and Promotion Committee, Aug. 2020 - present
- Member, University Council, Aug. 2020 - present
- Member, Faculty Senate, Aug. 2020 -present
- Undergraduate Advisor for Honors College students in ECE, Feb. 2015 - Aug. 2020
- Member, ECE ABET Assessment Committee, Sept. 2012 - Aug. 2020
- Member, ECE GARFAC (Grad Admissions Recruiting & Financial Aid Committee), Aug. 2009 - Aug. 2012
- Member, ECE Undergraduate Study Committee, Aug. 2007 - Aug. 2009
- Member, ECE Koenig Search Committee, Sept. 2008 - Aug. 2009
- Member, ECE Faculty Search Committee, Aug. 2005 - Aug. 2007
- Member of ECE Advisory Committee, Aug. 2004 - Aug. 2006
- Director, ECE Broadband Access Wireless Communication Lab, 2002 - present

Professional Services

- Associate Editor, *IEEE Internet of Things Journal*, 2021 - 2023
- Associate Editor, *IEEE Transactions on Signal Processing*, 2012-2016
- Associate Editor, *IEEE Signal Processing Letters*, 2007-2009
- Editorial Board Member, *EURASIP Journal on Wireless Communications and Networking (EWCN)*, 2004-2011
- Guest Editor, *EURASIP Journal on Wireless Communications and Networking (EWCN)*, Special issue on “Innovative Signal Transmission and Detection Techniques for Next Generation Cellular CDMA Systems”, Vol. 2004, No.1, Aug. 2004
- NSF Panelist for programs CCF, CNS and ECCS
- Reviewer for Department of Energys Technology Commercialization Fund
- Organization Committee Member, IEEE ICASSP 2016
- Organization Committee Member, IEEE ICNC 2019
- Co-Chair for Special Session on Brain Research, IEEE ICASSP 2016
- Referee for:
 - *IEEE Transaction on Communications*
 - *IEEE Transaction on Wireless Communications*
 - *IEEE Transaction on Information Theory*
 - *IEEE Transactions on Signal Processing*
 - *IEEE Communication Letters*
 - *IEEE Signal Processing Letters*
 - *EURASIP Journal on Applied Signal Processing*

- *EURASIP Journal on Wireless Communications and Networking*
- *IEEE International Conference on Communications*
- *IEEE Global Communications Conference*
- *IEEE International Conference on Computer Communication*
- *IEEE International Conference on Acoustics, Speech and Signal Processing*

Honors and Awards

- NSF CAREER Award, 2008
- Withrow Teaching Excellence Award, College of Engineering, Michigan State University, 2018
- Best paper award, IEEE GlobalSIP 2014
- Best paper award, IEEE ICNC 2017

Research Grants

- CCSS: Brain Network Analysis Using Communication Theory (PI), 09/01/2020 - 08/31/2023, \$470,000, National Science Foundation.
- SPX: Toward Network Level Parallel Computing: Security, Efficiency and Scalability (Co-PI, the PI is Dr. Jian Ren), 10/01/19 - 09/30/23, \$1,062,693, National Science Foundation.
- EAGER: Biomimetic wireless system design for IoT networks: from sensors to brain controlled applications (PI), 08/15/2017-08/14/2019, \$150,000, National Science Foundation.
- Travel Support for Student Participation in the 2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) (PI), 4/2015 -12/2016, \$25,000, National Science Foundation.
- NeTS: Small: Anti-Jamming Techniques for Secure Communications in Wireless Networks (PI), 08/2012-07/2016, \$380,000, National Science Foundation.
- Collaborative Research: CCSS: Cyber-Enabled Smart Systems for Seamless Secure Monitoring and Communications (PI), 09/2012-08/2015,\$250,000, National Science Foundation.
- NeTS: Small: Adaptive Network Coding for Wireless Relay Networks (Co-PI, the PI is Dr. Jian Ren) \$416,603, 8/2011-7/2015, National Science Foundation.
- Secure Data Fusion in Wireless Sensor Networks Under Byzantine Attacks, 6/1/2013-5/30/2014, (PI), 08/2012-07/2015, \$75,000, AFRL.
- CAREER: On Highly Efficient and Reliable Wireless Networks (PI), 2/2008-1/2013, \$445,598, National Science Foundation.
- CT-ER: Secure Communication System Design for Wireless Networks (PI) 08/07-07/09. \$250,000, National Science Foundation.
- Capacity enhanced random access control (PI), 1/16/2007-1/15-2008, \$100,000, National Science Foundation.
- Physical layer built-in security enhancement of CDMA systems (PI), 8/15/2003–5/17/2004, \$15,000. MSU Cyber-trust Initiative funds.
- Multiuser Detection and Source Separation for Wireless Communication System (PI), 12/15/2002-6/30/2004, \$50,000, MSU IRGP new faculty award.

Invited Talks

- Signal Processing in Wireless Security, Air Force Research Lab, 2005.
- Signal Processing in Wireless Networks – A Cross-Layer Perspective, Tsinghua University, 2006.
- Signal Processing in Wireless Networks – A Cross-Layer Perspective, Xi'an Jiaotong University, 2006.
- Reliability and Efficiency in Wireless Communications, Xidian University, 2008.
- Physical Layer Security Enhancement in Wireless Communication Systems, George Washington University, 2011.
- Reliable and Efficient Communications in Wireless Networks, Air Force Research Lab, 2014.
- A Unified Framework for Wireless Network Design and Analysis, Temple University, 2015.
- Toward the Convergence of Centralized and Ad Hoc Networks, Syracuse University, 2015.
- End-to-End Throughput Analysis of Multi-Hop Wireless Networks Using Stochastic Geometry, Chongqing University of Post and Telecommunications, 2017.
- Brain Network Analysis Based on Information Theory, Tongji University, 2017.
- Brain Network Analysis Based on Information Theory, Xidian University, 2017.
- Brain Network Connectivity Analysis Based on Communication Theory, University of California, Davis, 2020.
- Time-Varying Functional Connectivity Fading Analysis and Classification of Alzheimers Disease, Mild Cognitive Impairment and Normal Control Subjects based on Resting-State fMRI Data, Global Virtual Conference on Alzheimers Disease and Dementia (GVCAD), 2020

Publications

Books and Book Chapters

1. Tongtong Li, Tianlong Song and Yun Liang, Wireless Communications under Jamming: Security and Efficiency, Springer, Dec. 2018
2. Jian Ren and Tongtong Li, Network Management, Handbook of Technology Management, John Wiley & Sons, Inc., January 2010.
3. Jian Ren and Tongtong Li, Enterprise Security Architecture, Handbook of Technology Management, John Wiley & Sons, Inc., January 2010.

Journal Papers

1. Ehab Zaghoul, Tongtong Li, Matt Mutka and Jian Ren,, d-MABE: Distributed Multilevel Attribute-Based EMR Management and Applications, IEEE Transactions on Services Computing, accepted, to appear.
2. Yuan Liang, Yu Zheng, Brighty Renli, David C. Zhu, Fang Yu and Tongtong Li. Dynamic Functional Connectivity Fading Analysis and Classification of Alzheimers Disease, Mild Cognitive Impairment and Normal Control Subjects based on Resting-State fMRI Data. *OBM Neurobiology* 2020;4(2):20; doi:10.21926/obm.neurobiol.2002059.
3. Ehab Zaghoul, Tongtong Li, Matt Mutka and Jian Ren, Bitcoin and Blockchain: Security and Privacy, *IEEE Internet of Things Journal*, Vol. 7, No. 10, October 2020, pages: 10288-10313.

4. Yuan Liang and Tongtong Li, On the Discreteness of the Worst Jamming Distribution for SP-OFDM, *IEEE Transactions on Information Forensics and Security*, vol. 15, March 2020, pages: 2884 - 2897, doi: 10.1109/TIFS.2020.2978616.
5. Jian Li, Tongtong Li and Jian Ren, Beyond the MDS Bound in Distributed Storage, *IEEE Transactions on Information Theory*, vol. 66, No. 7, July 2020, pages: 3957-3975.
6. Ehab Zaghoul, Tongtong Li and Jian Ren, Bitcoin Double-Spending Profitability Analysis, *IEEE Blockchain Technical Briefs*, January 2020.
7. Yuan Liang, Jian Ren and Tongtong Li, Secure OFDM System Design and Capacity Analysis under Disguised Jamming, *IEEE Transactions on Information Forensics and Security*, vol. 15, pages: 738-752, 2020.
8. Zhe Wang, Yuan Liang, David C. Zhu, Tongtong Li, The Relationship of Discrete DCM and Directed Information in fMRI based Causality Analysis, *IEEE Transactions on Molecular, Biological, and Multi-Scale Communications*, Vol. 4, No. 1, 2018, pages: 3-13.
9. Jian Li, Tongtong Li, Jian Ren, and Han-Chieh Chao, Enjoy the Benefit of Network Coding: Combat Pollution Attacks in 5G Multihop Networks, *Wireless Communications and Mobile Computing*, Vol. 2018, Article ID 3473910, 13 pages, 2018.
10. Zhe Wang, Yu Zheng, David C. Zhu, Andrea C. Bozoki and Tongtong Li, Classification of Alzheimers Disease, Mild Cognitive Impairment and Normal Control Subjects Using Resting-State fMRI based Network Connectivity Analysis, *IEEE Journal of Translational Engineering in Health and Medicine*, Vol. 6, 2018, pages: 1-9.
11. Yuan Liang and Tongtong Li, End-to-End Throughput in Multi-Hop Wireless Networks With Random Relay Deployment, *IEEE Transactions on Signal and Information Processing over Networks*, Vol. 4, No. 3, 2018, pages: 613-625.
12. Run Tian, Yuan Liang, Xuezhi Tan and Tongtong Li, Overlapping User Grouping in IoT Oriented Massive MIMO Systems, *IEEE Access*, Vol. 5, 2017, pages: 14177-14186.
13. Di Tang, Tongtong Li and Jian Ren, Congestion-Aware Routing Schemes Based on Traffic Information in Sensor Networks, *Ad-Hoc & Sensor Wireless Networks*, Vol. 35, Issue number: 3-4 2017, Pages: 281-300
14. Jian Li, Tongtong Li and Jian Ren, "Optimal Construction of Regenerating Code through Rate-Matching in Hostile Networks", *IEEE Transactions on Information Theory*, Vol. 63, No. 7, 2017, pages: 4414-4429.
15. Mai Abdelhakim, Yuan Liang and Tongtong Li, Mobile Access Coordinated Wireless Sensor Networks - Design and Analysis, *IEEE Transactions on Signal and Information Processing over Networks*, Vol. 3, No. 1, 2017, pages: 172-186.
16. Tianlong Song, Wayne E. Stark, Tongtong Li and Jitendra K. Tugnait, Optimal Multiband Transmission Under Hostile Jamming, *IEEE Transaction on Communications*, IEEE Transactions on Communications, Vol. 64, No. 9, 2016, pages: 4013-4027.
17. Tianlong Song, Kai Zhou and Tongtong Li, CDMA System Design and Capacity Analysis under Disguised Jamming, *IEEE Transactions on Information Forensics and Security*, Vol. 11, No. 11, 2016, pages: 2487-2498.
18. Mai Abdelhakim, Yuan Liang and Tongtong Li, Mobile Coordinated Wireless Sensor Network: An Energy Efficient Scheme for Real-Time Transmissions, *IEEE Journal on Selected Areas in Communications*, Vol. 34, No. 5, 2016, pages: 1663-1675.

19. Zhe Wang, David C. Zhu and Tongtong Li, Causality Analysis of fMRI Data Based on the Directed Information Theory Framework, *IEEE Transactions on Biomedical Engineering*, May 2016, pages: 1002 - 1015.
20. Jian Ren, Yun Li, Tingting Jiang and Tongtong Li, Anonymous communication in Overlay Networks, *Security and Communication Networks*, Vol. 9, Issue 3, 2016, pages: 229-240.
21. Ahmed Alahmadi, Zhaoxi Fang, Tianlong Song and Tongtong Li, Mitigation of PUEA Using Energy Harvesting in OFDM-based Cognitive Radio Networks, *IEEE Transactions on Information Forensics and Security*, Vol. 10, No. 10, Oct. 2015, pages: 2131-2142.
22. Zhaoxi Fang, Tianlong Song, and Tongtong Li, Energy Harvesting for Two-Way OFDM Communications under Hostile Jamming, *IEEE Signal Processing Letters*, Vol. 22, No. 4, 2015, pages: 413-416.
23. Di Tang, Tongtong Li, Jian Ren and Jie Wu, Cost-Aware SEcure Routing (CASER) Protocol Design for Wireless Sensor Networks, *IEEE Transactions on Parallel and Distributed Systems*, Vol. 26, No. 4, April 2015, pages: 960-973.
24. Tianlong Song, Tongtong Li and Jitendra Tugnait, Spectrally Efficient Multi-Carrier Transmission with Message-Driven Subcarrier Selection, *IEEE Transactions on Communications*, *IEEE Transactions on Communications*, Vol. 62, No. 7, 2014, pages: 2444-2455
25. Ahmed Alahmadi, Mai Abdelhakim, Jian Ren and Tongtong Li, Defense Against Primary User Emulation Attacks in Cognitive Radio Networks Using Advanced Encryption Standard, *IEEE Transactions on Information Forensics and Security*, May 2014, page(s): 772-781
26. Mai Abdelhakim, Leonard Lightfoot, Jian Ren and Tongtong Li, Distributed Detection in Mobile Access Wireless Sensor Networks Under Byzantine Attacks, *IEEE Transactions on Parallel and Distributed Systems*, April 2014, Page(s): 950 - 959.
27. Tongtong Li, Mai Abdelhakim and Jian Ren, N-Hop Networks — A General Framework for Wireless System, *IEEE Wireless Communications*, April 2014, Pages: 98 - 105.
28. Lei Zhang, Huahui Wang and Tongtong Li, Anti-Jamming Message-Driven Frequency Hopping: Part I — System Design, *IEEE Transactions on Wireless Communications*, Vol. 12, No. 1, 2013, Page(s): 70 - 79
29. Lei Zhang and Tongtong Li, Anti-Jamming Message-Driven Frequency Hopping: Part II — Capacity Analysis Under Disguised Jamming, *IEEE Transactions on Wireless Communications*, Vol. 12, No. 1, 2013, Page(s): 80 - 88
30. Tongtong Li, Jian Ren and Xiaochen Tang, “Secure Monitoring and Control Systems for Smart Home, *IEEE Wireless Communications*, Vol. 19, No. 3, 2012, Page(s): 66 - 73
31. Lei Zhang, Jian Ren and Tongtong Li, “Time-Varying Jamming Modeling and Classification, *IEEE Transactions on Signal Processing*, Vol. 60, No. 7, 2012, Page(s): 3902 - 3907
32. Tingting Jiang, Tongtong Li and Jian Ren, Towards Secure Cognitive Communications in Wireless Networks, *IEEE Wireless Communications*, Vol. 19, No. 4, August 2012, pages: 82-88.
33. Huahui Wang, Lei Zhang, Tongtong Li, and Jitendra Tugnait, Spectrally efficient jamming mitigation based on code-controlled frequency hopping, *IEEE Transactions on Wireless Communications*, Vol. 10, No. 3, 2011, pp: 728 - 732.
34. Huahui Wang and Tongtong Li, Stability Analysis of Hybrid ALOHA, *EURASIP Journal on Wireless communications and Networking*, vol. 2010(2010), Article ID 534712, 11 pages, doi:10.1155/2010/753931
35. Jian Ren, Yun Li and Tongtong Li, SPM: Source Privacy for Mobile Ad Hoc Networks, *EURASIP Journal on Wireless communications and Networking*, vol. 2010(2010), Article ID 534712, 10 pages, doi: 10.1155/2010/534712.

36. Qi Ling and Tongtong Li, Message-Driven Frequency Hopping – Design and Analysis, *IEEE Transactions on Wireless Communications*, vol. 8, No. 4, April 2009, pages: 1773-1782.
37. Leonard Lightfoot, Lei Zhang, Jian Ren and Tongtong Li, Secure Collision-Free Frequency Hopping for OFDMA Based Wireless Networks, *EURASIP Journal on Advances in Signal Processing*, vol. 2009 (2009), doi: 10.1155/2009/361063
38. Qi Ling and Tongtong Li, Blind Channel Estimation for MIMO Systems with Structured Transmit Delay Scheme, *IEEE Transactions on Circuits and Systems I*, vol. 8, No. 4, April 2009, pages: 1773-1782.
39. Huahui Wang and Tongtong Li, Hybrid ALOHA: A Novel MAC Protocol, *IEEE Transactions on Signal Processing*, vol. 55, pp: 5821-5832, Dec. 2007.
40. Huahui Wang and Tongtong Li, Channel Tracking and Signal Detection for MC-CDMA in Time-Varying Environments, *IEEE Transactions on Vehicular Technology*, vol. 56, no. 6, pp: 3613-3620, Nov. 2007.
41. Tongtong Li, Qi Ling and Zhi Ding, Transmit Delay Structure Design for Blind Channel Estimation over Multipath Channels, *EURASIP Journal on Wireless Communications and Networking*, vol. 2007, Article ID 26123, 12 pages, 2007.
42. Tongtong Li, Qi Ling and Jian Ren, Physical Layer Built-in Security Analysis and Enhancement of CDMA Systems, *EURASIP Journal on Wireless Communications and Networking*, Jan. 2007.
43. Tongtong Li, Huahui Wang and Qi Ling, Source-Aware Non-Uniform Information Transmission for Minimum Distortion, *IEEE Signal Processing Letters*, vol. 14, No. 2, pp. 85-88, Feb. 2007.
44. Gokul Swamy, Qi Ling, Tongtong Li and Ramakrishna Mukkamala, Blind Identification of the Aortic Pressure Waveform from Multiple Peripheral Artery Pressure Waveform, *American Journal of Physiology: Heart and Circulatory Physiology*, 292: H2257-H2264, January 5, 2007.
45. Tongtong Li, Weiguo Liang, Zhi Ding and J.K. Tugnait, Blind Multiuser Detection for Long code CDMA Systems with Transmission Induced Cyclostationarity, *EURASIP Journal on Wireless Communications and Networking*, special issue on Advanced Signal Processing Algorithms for Wireless Communications, vol. 2005, No. 2, pp. 206-215, April 15, 2005.
46. Weiguo Liang, Tongtong Li and J.K. Tugnait, Blind Detection of Multirate Asynchronous CDMA Signals using Super-Exponential Methods, *IEEE Signal Processing Letters*, vol. SPL-12, pp. 218-221, March 2005.
47. Tongtong Li and J.K. Tugnait, Super-exponential methods for blind detection of asynchronous CDMA signals over multipath channels, *IEEE Transactions on Wireless Communications*, vol. 3, no. 5, pp. 1379-1385, Sept. 2004.
48. J.K. Tugnait and Tongtong Li, Blind asynchronous multiuser CDMA receivers for ISI channels using code-aided CMA, *IEEE Journal on Selected Areas in Communications*, Special issue on *Multiuser Detection Techniques with Application to Wired and Wireless Communications Systems*, vol. 19, no. 8, pp. 1520-1530, August 2001.
49. J.K. Tugnait and Tongtong Li, Blind detection of asynchronous CDMA signals in multipath channels using code-constrained inverse filter criteria, *IEEE Transactions on Signal Processing*, vol. 49, no. 7, pp. 1300-1309, July 2001.
50. J.K. Tugnait and Tongtong Li, A multistep linear prediction approach to blind asynchronous CDMA channel estimation and equalization, *IEEE Journal on Selected Areas in Communications*, vol. 19, no. 6, pp. 1090-1102, June 2001.
51. Tongtong Li and Zhi Ding, Joint transmitter-receiver optimization for partial response channels based on non-maximally decimated filterbank precoding technique, *IEEE Transactions on Signal Processing*, vol. 47, no. 9, pp. 2407-2414, Sept. 1999.

Conference Papers

1. Tongtong Li, Yuan Liang, Yu Zheng, David Zhu, Jian Ren and Fang Yu, Time-Varying Functional Connectivity Fading Analysis and Classification of Alzheimers Disease, Mild Cognitive Impairment and Normal Control Subjects based on Resting-State fMRI Data, Global Virtual Conference on Alzheimers Disease and Dementia (GVCAD-2020). J Neurol Exp Neurosci 6(2): S4-S7.
2. Ehab Zaghoul, Tongtong Li and Jian Ren, Anonymous and Coercion-Resistant Distributed Electronic Voting, IEEE ICNC 2020, Feb. 17-20, 2020, Big Island, Hawaii, USA. (Acceptance Rate: 119/481=24.7)
3. Yuan Lang, Jian Ren and Tongtong Li, Secure and Efficient OFDM System Design under Disturbed Jamming, IEEE ICNC 2020, Feb. 17-20, 2020, Big Island, Hawaii, USA. (Acceptance Rate: 119/481=24.7)
4. Yuan Liang, Yunhao Liu, Jian Ren and Tongtong Li, Malicious Link Detection in Multi-Hop Wireless Sensor Networks, *IEEE Global Communications Conference (GLOBECOM) 2019*, Waikoloa, Hawaii, USA.
5. Yu Zheng and Tongtong Li, Robust Conditional Granger Causality Analysis, *IEEE International Engineering in Medicine and Biology Conference (EMBC) 2019*, Berlin, Germany.
6. Brightly Renli, Yu Zheng, David Zhu and Tongtong Li, Fading Effect Analysis in Time-Varying Functional Connectivity for AD, MCI and NC Based on Resting-State fMRI Data, *IEEE International Engineering in Medicine and Biology Conference (EMBC) 2019*, Berlin, Germany.
7. Ehab Zaghoul, Tongtong Li and Jian Ren, Security and Privacy of Electronic Health Records: Decentralized and Hierarchical Data Sharing using Smart Contracts, *International Conference on Computing, Networking and Communications (ICNC) 2019*, Feb. 18-21, 2019, Honolulu, Hawaii, USA. (Acceptance Rate: 118/418=28.2%)
8. Ahmed Alahmadi, Yuan Liang, Run Tian, Jian Ren and Tongtong Li, Blocking Probability Analysis for Relay-Assisted OFDMA Networks using Stochastic Geometry, *International Conference on Computing, Networking and Communications (ICNC) 2019*, Feb. 18-21, 2019, Honolulu, Hawaii, USA. (Acceptance Rate: 118/418=28.2%)
9. Yuan Liang, Jian Ren and Tongtong Li, The Worst Jamming Distribution for Securely Precoded OFDM, *IEEE Global Communications Conference (GLOBECOM) 2018*, Dec. 9-13, 2018, Abu Dhabi, UAE.
10. Ehab Zaghoul, Tongtong Li and Jian Ren, An Attribute-Based Distributed Data Sharing Scheme, *IEEE Global Communications Conference (GLOBECOM) 2018*, Dec. 9-13, 2018, Abu Dhabi, UAE.
11. M. H. Affi, Ehab Zaghoul, Tongtong Li and Jian Ren, UBNB-PPDP: Utility-Boosting Negotiation-Based Privacy Preserving Data Publishing, *IEEE Global Communications Conference (GLOBECOM) 2018*, Dec. 9-13, 2018, Abu Dhabi, UAE.
12. Zhe Wang, Yu Zheng, Michael Jigo, Taosheng Liu, Jian Ren, Zhi Tian and Tongtong Li, Decoding Behavioral Accuracy in an Attention Task Using Brain fMRI Data, *IEEE Global Communications Conference (GLOBECOM) 2018*, Dec. 9-13, 2018, Abu Dhabi, UAE.
13. Kai Zhou, Tongtong Li and Jian Ren, Security and Privacy Enhancement for Outsourced Biometric Identification, *IEEE Global Communications Conference (GLOBECOM) 2018*, Dec. 9-13, 2018, Abu Dhabi, UAE.
14. Yuan Liang, Yu Zheng, Jian Ren and Tongtong Li, End-to-End Delay in Multi-Hop Wireless Networks With Random Relay Deployment, *2018 International Conference on Computing, Networking and Communications (ICNC)*, Mar. 5-8, 2018, Maui, Hawaii, USA. (Acceptance Rate: 115/427=26.9%)

15. Tianlong Song, Yuan Liang, Tongtong Li, Physical Layer Security of Multiband Communications Under Hostile Jamming, 2017 International Conference on Computing, Networking and Communications (ICNC), Jan. 26-29, 2017, Silicon Valley, USA ([Best Student Paper Award](#)).
16. Run Tian, Yuan Liang and Tongtong Li, Overlapping User Grouping in IoT Oriented Massive MIMO Systems, 2017 International Conference on Computing, Networking and Communications (ICNC), Jan. 26-29, 2017, Silicon Valley, USA.
17. Yuan Liang, Jian Ren and Tongtong Li, End-to-End Throughput Analysis of Multi-Hop Wireless Networks Using Stochastic Geometry, 10th EAI International Conference on Mobile Multimedia Communications (MOBIMEDIA), July 13-14, 2017, Chongqing, China.
18. Zhe Wang, Tianlong Song, Yuan Liang and Tongtong Li, Error Probability Analysis for LDA-Bayesian Based Classification of Alzheimer's Disease and Normal Control Subjects, *IEEE GlobalSIP 2016*, Dec. 7-9, 2016, Washington D.C., USA.
19. Yuan Liang, Tianlong Song and Tongtong Li, Energy Efficient Multi-hop Wireless Backhaul in Heterogeneous Cellular Networks, *IEEE GlobalSIP 2016*, Dec. 7-9, 2016, Washington D.C., USA.
20. Zhe Wang, Tianlong Song, Ahmed Alahmadi, David C. Zhu, Andrea C. Bozoki and Tongtong Li, A Regularized LDA Approach for AD, MCI, and Normal Subjects Classification Using Resting-State fMRI Data, *2016 International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, Aug. 16-20, 2016, Orlando, Florida, USA
21. Kai Zhou, Tianlong Song, Jian Ren, Tongtong Li, Robust CDMA receiver design under disguised jamming, *the 2011 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2016)*, Mar., 2016, Shanghai, China.
22. Zhe Wang, Ahmed Alahmadi, David Zhu and Tongtong Li, Brain Functional Connectivity Analysis Using Mutual Information, *IEEE Global Conference on Signal and Information Processing (GlobalSIP) 2015*, December 14-16, 2015, Orlando, FL, USA.
23. Mai Abdelhakim, Leonard E Lightfoot, Jian Ren and Tongtong Li, Reliable Communications over Multihop Networks Under Routing Attacks, *IEEE Global Communication Conference (GLOBECOM) 2015*, December 6-10, 2015, San Diego, CA, USA.
24. Jian Li, Tongtong Li and Jian Ren, Rate-Matched Regenerating Code in Hostile Networks, *IEEE ICC 2015*, London, UK, 8-12 June, 2015.
25. Ahmed Alahmadi, Tianlong Song and Tongtong Li, Sub-band Detection of Primary User Emulation Attacks in OFDM-based Cognitive Radio Networks, *IEEE Global Conference on Signal and Information Processing (GlobalSIP) 2014*, December 3-5, 2014, Atlanta, Georgia, USA. ([Best Student Paper Award](#)).
26. Tianlong Song, Zhaoxi Fang, Jian Ren and Tongtong Li, Precoding of OFDM under Disguished Jamming, *IEEE Global Communication Conference (GLOBECOM) 2014*, December 8-12, 2014, Texas, Austin, USA.
27. Mai Abdelhakim, Jian Ren and Tongtong Li, Throughput Analysis and Routing Security Discussions of Mobile Access Coordinated Wireless Sensor Networks, *IEEE Global Communication Conference (GLOBECOM) 2014*, December 8-12, 2014, Texas, Austin, USA.
28. Jian Li, Tongtong Li and Jian Ren, Secure Regenerating Code, *IEEE Global Communication Conference (GLOBECOM) 2014*, December 8-12, 2014, Texas, Austin, USA.
29. Jian Li, Tongtong Li and Jian Ren, Beyond the MDS Bound in Distributed Cloud Storage, *IEEE INFOCOM 2014*, April 27 - May 2, 2014, Toronto, Canada. (Acceptance Rate: 320/1645=19.4%).
30. Jian Li, Tongtong Li and Jian Ren, Combating Network Pollution Attacks: A Cascaded Error-Control Coding Approach, *Proceedings of IEEE Globecom 2013*, Dec. 9-13, Atlanta, USA. (Acceptance Rate: 37%).

31. Tianlong Song and Tongtong Li, A Highly Efficient Multi-Carrier Transmission Scheme with Message-Driven Idle Subcarriers, *Proceedings of IEEE Globecom 2013*, Dec. 9-13, Atlanta, USA. (Acceptance Rate: 37%).
32. Mai Abdelhakim, Jian Ren and Tongtong Li, Mobile Access Coordinated Wireless Sensor Networks - Topology Design and Throughput Analysis, *Proceedings of IEEE Globecom 2013*, Dec. 9-13, Atlanta, USA. (Acceptance Rate: 37%).
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