Shiwen Mao

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CURRENT APPOINTMENT

Sam Ginn Endowed Professor	Department of Electrical & Computer Engineering, Auburn University, AL
Director	Wireless Engineering Research and Education Center (WEREC)

PROFESSIONAL PREPARATION

❑ **Research Scientist**, Dept. Electrical & Computer Engineering, Virginia Tech	04/05 ~ 04/06
❑ **Post-doctoral/Research Scientist**, Dept. Electrical & Computer Engineering, Virginia Tech	11/03 ~ 04/06
❑ **Ph.D.** Electrical & Computer Engineering, Polytechnic Univ.	01/04
❑ **M.S.** System Engineering, Polytechnic Univ.	06/00
❑ **M.E.** Electronic Engineering**,** Tsinghua Univ., Beijing, P.R. China	05/97
❑ **B.E.** Electronic Engineering**,** Tsinghua Univ., Beijing, P.R. China	07/94
❑ **B.Ec.** Enterprises Management**,** Tsinghua Univ., Beijing, P.R. China	07/94

RESEARCH INTERESTS

- ❑ Design, algorithmic, optimization, and performance issues in wireless communications and networks
- ❑ Multimedia communications over wired and wireless networks
- ❑ Cognitive radio, femtocell networks, mmWave networks, massive MIMO, and free space optical networks
- ❑ Smart grid, green communications and networking, cloud computing
- ❑ Localization and location based services, health sensing

RESEARCH EXPERIENCE & APPOINTMENTS

❑	Director	WEREC, Auburn University	07/15 ~ present
❑	Assistant Director/Director	NSF I/UCRC BWAC Center Auburn Univ. Site	04/13 ~ 09/16
❑	Sam Ginn Endowed Prof.	Dept. ECE, Auburn University, Auburn, AL	07/15 ~ present
❑	McWane Associate Professor	Dept. ECE, Auburn University, Auburn, AL	10/12 ~ 06/15
❑	Associate Professor	Dept. ECE, Auburn University, Auburn, AL	08/11 ~ present
❑	Assistant Professor	Dept. ECE, Auburn University, Auburn, AL	08/06 ~ 08/11
❑	Research Scientist	Dept. ECE, Polytechnic University, Brooklyn, NY	04/06 ~ 07/06
❑	Research Scientist	Dept. ECE, Virginia Tech, Blacksburg, VA	04/05 ~ 04/06
❑	Postdoc Research Associate	Dept. ECE, Virginia Tech, Blacksburg, VA	12/03 ~ 04/05

FUNDED RESEARCH (selected)

- ❑ W.-S. Ku (PI), M.-K. Lee (Co-PI), **S. Mao** (Co-PI), and A. Skjellum (Co-PI), "CICI: Data Integrity Assurance and Privacy Protecion Solutions for Secure Interoperability of Cloud Resources," *NSF Cybersecurity Innovation for Cyberinfrastructure (CICI) Program*, Oct. 1, 2016 ~ Sept. 30, 2019.
- ❑ **S. Mao** (PI), "Spectral Graph Partitioning Techniques for Wireless Link Scheduling," *U.S. Naval Research Laboratory* (NRL), Aug. 2014 ~ Aug. 2015.
- ❑ **S. Mao** (PI) and P. Agrawal (Co-PI), "Adaptive and Secure Indoor Localization," *Cisco Research Center,* Jan. 2014 ~ Dec. 2014.
- ❑ **S. Mao** (PI), P. Agrawal (former PI), F. Dai (co-PI), G.Niu (co-PI), J. Tugnait (co-PI), V. Agrawal (Senior Personnel), T. Roppel (Senior Personnel), and C.-H. Wu (Senior Personnel), "I/UCRC: Collaborative Research: Broadband Wireless Access & Applications Center (BWAC)," *NSF Industry/University Cooperative Research Center Program* (I/UCRC), Sept. 2013 ~ Aug. 2018.
- ❑ **S. Mao** (PI), "NeTS: Small: Collaborative Research: Exploring the 60 GHz Spectral Frontier for Multi-Gigabit Wireless Networks," *NSF Networking Technology and Systems Program (NeTS)*, Aug. 2013 ~ Aug. 2016.
- ❑ **S. Mao** (PI), "Collaborative Research: EARS: Cognitive and Efficient Spectrum Access in Autonomous Wireless Networks," *NSF Enhancing Access to the Radio Spectrum Program (EARS)*, Feb. 2013 ~ Jan. 2016.
- ❑ **S. Mao** (PI), P. Agrawal (co-PI), and J. Tugnait (co-PI), "TUES: Introducing Software Defined Radio into Undergraduate Wireless Engineering Curriculum Through a Hands-on Approach," *NSF Transforming Undergraduate Education in Science, Technology, Engineering and Mathematics Program* (TUES), Oct. 2011 ~ Sept. 2014.
- ❑ **S. Mao** (PI) and P. Agrawal (co-PI), "Collaborative Research: Unlocking Spectrum Efficiency for Future Wireless Networks," *NSF Fundamental Research Program* (FRP) for Industry/University Cooperative Research Centers, Sept. 2012 ~ Aug. 2013.
- ❑ **S. Mao** (PI) and P. Agrawal (co-PI), "EAGER: An Exploratory Study Toward Robust Free Space Optical Networks," *NSF EArly-concept Grants for Exploratory Research Program* (EAGER), Jan. 2012 ~ Dec. 2013.
- ❑ **S. Mao** (PI) and P. Agrawal (co-PI), "Collaborative Research: Fundamental Research on Adaptive Wireless Video Systems," *NSF Fundamental Research Program* (FRP) for I/UCRC, Sept. 2011 ~ July. 2013.

- **S. Mao** (PI), "CAREER: Towards Rich Multimedia Experience in Emerging Cognitive Radio Networks," *NSF Faculty Early Career Development Program* (CAREER), Aug. 2010 ~ Aug. 2015.
- **S. Mao** (PI), "IHCS: Towards Efficient Medium Access Control for Wireless Networks," *NSF Integrative, Hybrid & Complex Systems Program* (IHCS), June 2008 ~ May 2013.
- **S. Mao** (PI) and P. Agrawal (co-PI)**,** "Collaborative Research: Unlocking Capacity for Wireless Networks Using Cooperative and Cognitive Techniques," *NSF Fundamental Research Program* (FRP) for I/UCRC, Sept. 2010 ~ Aug. 2011.
- **S. Mao** (PI) and P. Agrawal (co-PI), "Fundamental Research on Video Streaming for Technology-based Classroom Learning Evaluation," *NSF Fundamental Research Supplements for* I/UCRC, Sept. 2008 ~ Aug. 2010.

STUDENT MENTORING

AS MAJOR PROFESSOR (@ Auburn University) 08/07 ~ present

- DOCTORAL STUDENTS
  CURRENT (6): *Ningkai Tang*, *Kefan Xiao*, *Xuyu Wang*, *Mingjie Feng*, *Yu Wang*, *Zhifeng He*
  GRADUATED (7): *Zhefeng Jiang (2016)*, *Yu Wang* (2015), *Yi Xu* (2015), *Hui Zhou* (2014), *Yingsong Huang* (2013), *Donglin Hu* (2012), *InKeun Son* (2010)
- MS STUDENTS
  CURRENT (7): *Xiangyu Wang*, *Runze Huang, Chao Yang, Zhitao Yu, Amogh Kashyap*, *Venkata Satya Sandeep, Markus Kreitzer*
  GRADUATED (13): *Abhishek Kulkarni (2016)*, *Lingjun Gao* (2015), *Yufan Shi* (2015), *Mengdi Wu* (2014), *Sushma Reddy Kondapally* (2014), *Shaila Kotha* (2014), *Chengdong Lu* (2014), *Ningkai Tang* (2014), Jing Ning (2014), *Matthew Rhodes* (2013), *Mohammed Rizwan Adil* (2012), *Sunjai Kim* (2011), *PhillipWalsh* (2010)

AWARDS & HONORS

- Auburn Authors Award, Graduate School and Auburn University Libraries, Auburn University, Apr. 2016
- The 2015 IEEE Global Communications Conference (GLOBECOM) Best Paper Award, San Diego, CA, Dec. 2015
- Distinguished Service Award, IEEE Communications Society (ComSoc) Technical Committee on Communications Switching and Routing (TC CSR), Dec. 2015
- Samuel Ginn Endowed Professorship, Samuel Ginn College of Engineering, Auburn University, July 2015 ~ present
- Auburn Alumni Engineering Council Faculty Research Award—Senior Award, Auburn University, Apr. 2015
- Auburn Authors Award, Graduate School and Auburn University Libraries, Auburn University, Apr. 2015
- The 2015 IEEE Wireless Communications and Networking Conference Best Paper Award, New Orleans, LA, Mar. 2015
- Early promotion to the rank of Full Professor at Auburn University, effective Fall 2015
- The 2014 Exemplary Editor, IEEE Communications Surveys & Tutorials (2 out of 86), Jan. 2016
- Certificate of Appreciation, IEEE Communications Society, 2015, 2014, 2013, 2012, 2011, 2010, 2007; from ICST, 2009
- Our NSF Project CNS-1320664 "Exploring the 60 GHz Spectral Frontier for Multi-Gigabit Wireless Networks" was mentioned in the *FCC NOI to Examine Use of Bands above 24 GHz for Mobile Broadband*, GN Docket No. 14-154, Oct. 17, 2014
- Keynote Speaker, The 8th International Conference on Mobile Multimedia Communications (MobiMedia'15), Chengdu, China, May 25–27, 2015
- Distinguished Lecturer (DL) of IEEE Vehicular Technology Society (VTS), Class of 2014, July 2014--June 2016
- Runner-up for the 2013 Fabio Neri Best Paper Award: paper "*On the design and optimization of a free space optical access network*" published in Elsevier Optical Switching and Networking Journal (Vol.18, Part A, Jan. 2014)
- The 2013 IEEE International Conference on Communications (ICC) Best Paper Award, Budapest, Hungary, June 2013
- The 2013 IEEE ComSoc MMTC Outstanding Leadership Award, IEEE Communications Society Multimedia Communications Technical Committee, June 2013
- The 2012 Exemplary Editor, IEEE Communications Surveys & Tutorials (2 out of 89), Mar. 2013
- McWane Endowed Professorship in the Samuel Ginn College of Engineering for the Department of Electrical and Computer Engineering, Auburn University, July 2012
- Auburn Alumni Council Research Awards for Excellence—Junior Award, Auburn University, Apr. 2011
- Auburn Authors Award (two awards), Graduate School and Auburn University Libraries, Auburn University, Apr. 2011
- National Science Foundation Faculty Early Career Development (CAREER) Award, Aug. 2010
- Editor's Selected Paper Recommendation – "selected from papers published within the past 5 years with significant impact on future research direction." IEEE Communications Society Multimedia Communications Technical Committee (MMTC) E-Letter, vol.4, no.3, Apr. 2009
- Best Paper Runner-up Award, The Fifth International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (QShine 2008), Hong Kong, P.R. China, July 2008
- The 2004 IEEE Communications Society Leonard G. Abraham Prize in the Field of Communications Systems – IEEE Journal on Selected Areas in Communications best paper award for Year 2003

STUDENT AWARDS & HONORS (selected, since 2012)

- Zhifeng He: Outstanding Doctoral Student for 2015-2016, Auburn University, Apr. 2016

- Zhifeng He: The 2015 IEEE Global Communications Conference (GLOBECOM) Best Paper Award, San Diego, CA, Dec. 2015
- Yingsong Huang: Auburn University's nominee to participate in the national competition for distinguished dissertations sponsored by the Council of Graduate Schools and ProQuest, May 2014
- Yingsong Huang: The 2014 Auburn University Graduate School Distinguished Dissertation Awards, May 2014
- Yi Xu: Outstanding International Graduate Student Award for Academic Excellence in the Electrical and Computer Engineering Department, 2013 ~ 2014
- Xuyu Wang: co-recipient of the Second Prize of Natural Scientific Award of Ministry of Education, 2013, based on his MS work with former advisor Dr. Xinbo Gao at Xidian University, Xi'an, China
- In Keun Son: runner-up for the 2013 Fabio Neri Best Paper Award, Elsevier Optical Switching and Networking Journal
- Xuyu Wang: Woltosz Fellowship, Aug. 2013 ~ Aug. 2017
- Mingjie Feng: Woltosz Fellowship, Aug. 2013 ~ Aug. 2017
- Hui Zhou: The 2013 IEEE International Conference on Communications Best Paper Award, June 2013
- Yingsong Huang: Outstanding International Graduate Student Award for Academic Excellence in the Samuel Ginn College of Engineering, 2012 ~ 2013
- Yingsong Huang: Outstanding International Graduate Student Award for Academic Excellence in the Electrical and Computer Engineering Department, 2012 ~ 2013
- Yu Wang: Third Best Student Poster Award, The NSF Broadband Wireless Access and Applications Center (BWAC) Kickoff Meeting, Biosphere 2, Tucson, AZ, Apr. 2013
- Donglin Hu: Outstanding Doctoral Student for 2011-2012, The Graduate School and The Graduate Student Council, Auburn University, Apr. 2012

BOOKS & BOOK CHAPTERS (my students are marked with *, totally 6 books, 12 book chapters)

[B1] M. Chen, **S. Mao**, Y. Zhang, and V.C.M. Leung, *Big Data: Related Technologies, Challenges and Future Prospects*. Springer Briefs Series on Wireless Communications, New York, NY: Springer, 2014. ISBN-10: 3319062441, ISBN-13: 978-3319062440.

[B2] **S. Mao**, *Video Streaming over Cognitive Radio Networks: When Quality of Service Meets Spectrum*. New York, NY: Springer Science+Business Media, Jan. 2014. ISBN: 978-1-4614-4956-0; DOI: 10.1007/978-1-4614-4957-7.

[B3] **S. Mao** and T.S. Rappaport, "Millimeter wave wireless networks: A medium access control perspective," Chapter in *Wireless Network Performance Enhancement via Directional Antennas: Models, Protocols, and Systems*, J. D. Matyjas, F. Hu, and S. Kumar (editors). New York, NY: CRC Press, 2015. ISBN: 9781498707534.

[B4] M. X. Gong, E. Perahia, **S. Mao**, and B. Hart, "Advanced technologies in Gigabit Wireless LANs: An in-depth overview of 802.11ac," Chapter 2 in *The Future of Wireless Networks: Architectures, Protocols and Services*, pp.25-48, M. Guizani, H.-H. Chen, and C. Wang (editors). New York, NY: CRC Press, Jan. 2015.

JOURNAL & MAGAZINE PUBLICATIONS (since 2015, my students are marked with *, totally 93)

[E1] X. Wang*, L. Gao*, **S. Mao**, and S. Pandey, "CSI-based fingerprinting for indoor localization: A deep learning approach," *IEEE Transactions on Vehicular Technology*, to appear.

[E2] M. Feng*, **S. Mao**, and T. Jiang, "Enhancing the performance of future wireless networks with Software Defined Networking," *Springer Frontiers of Information Technology & Electronic Engineering Journal*, to appear.

[E3] Z. He*, **S. Mao**, and S. Kompella, "Quality of Experience driven multi-user video streaming in cellular cognitive radio networks with single channel access," *IEEE Transactions on Multimedia*, to appear.

[E4] M. Feng* and **S. Mao**, "Harvest the potential of massive MIMO with multi-layer technologies," *IEEE Network*, to appear.

[E5] M. Chen, Y. Qian, **S. Mao**, W. Tang, and X. Yang, "Software-defined mobile networks security," *ACM/Springer Mobile Networks and Applications* (MONET) Journal, Special Issue on CloudComp 2015, to appear. DOI: 10.1007/s11036-015-0665-5.

[E6] A. Seetharam and **S. Mao**, "Advances and future directions in content-centric networking," *E-Letter* of IEEE ComSoc Multimedia Communications Technical Committee (MMTC), vol.10, no.6, pp.45-47, Nov. 2015.

[E7] Z. Jiang* and **S. Mao**, "Energy delay trade-off in cloud offloading for multi-core mobile devices," *IEEE Access Journal*, Special Section on Emerging Cloud-based Wireless Communications and Networks, vol.3, no.1, pp.2306-2316, Nov. 2015.

[E8] Z. He*, **S. Mao**, and T. Jiang, "A Survey of QoE driven video streaming over cognitive radio networks," *IEEE Network*, vol.29, no.6, pp.20-25, Nov./Dec. 2015.

[E9] Z. He*, **S. Mao**, and S. Kompella, "A decomposition approach to quality of service driven multi-user video streaming in cellular cognitive radio networks," *IEEE Transactions Wireless Communications*, to appear.

[E10] Y. Xu* and **S. Mao**, "User association in Massive MIMO HetNets," *IEEE Systems Journal*, Special Issue on 5G Wireless Systems with Massive MIMO, vol.10, to appear. DOI: 10.1109/JSYST.2015.2475702.

[E11] H. Zhou*, **S. Mao**, P. Agrawal, "Optical power allocation for adaptive transmissions in free space optical networks," *Elsevier Digital Communications and Networks Journal*, vol.1, no.3, pp.171-180, Aug. 2015. DOI: 10.1016/j.dcan.2015.09.001.

[E12] N. Tang*, **S. Mao**, and S. Kompella, "Power control in full duplex underlay cognitive radio networks," *Elsevier Ad Hoc Networks Journal*, vol.37, no.2, pp.183-194, Feb. 2016. DOI: 10.1016/j.adhoc.2015.08.018.

[E13] Z. He*, **S. Mao**, and T. Rappaport, "On link scheduling under blockage and interference in 60GHz ad hoc networks," *IEEE Access Journal*, vol.3, no.1, pp. 1437-1449, Aug. 2015. DOI: 10.1109/ACCESS.2015.2470563.

[E14] Y. Wang*, **S. Mao**, and R.M. Nelms, "On hierarchical power scheduling for the macrogrid and cooperative microgrids," *IEEE Transactions on Industrial Informatics*, vol.11, no.6, pp.1574-1584, Dec. 2015. DOI: 10.1109/TII.2015.2417496.

[E15] Y. Xu*, **S. Mao**, and X. Su, "Interference alignment improves the capacity of OFDMA systems," *IEEE Transactions on Vehicular Technology*, to appear.

[E16] J. Gao, B. Zhang, Z. Jiao, and **S. Mao**, "Adaptive compressive sensing based sample scheduling mechanism for wireless sensor networks," Elsevier Pervasive and Mobile Computing Journal, Special Issue on "Recent Developments in Cognitive Radio Sensor Networks, to appear.

[E17] M. Feng*, **S. Mao**, and T. Jiang, "Joint duplex mode selection, channel allocation, and power control for full-duplex cognitive femtocell networks," *Elsevier Digital Communications and Networks Journal*, to appear. (16 pages)

[E18] H. Zhou*, **S. Mao**, and P. Agrawal, "Approximation algorithms for cell association and scheduling in femtocell networks," *IEEE Transactions on Emerging Topics in Computing* (TETC), Special Section on Emerging Mobile and Ubiquitous Systems, to appear. DOI: 10.1109/TETC.2015.2395093. (12 pages)

[E19] I.-K. Son*, **S. Mao**, Y. Li, M. Chen, M.X. Gong, and T.S. Rappaport, "Frame-based medium access control for 5G wireless networks," *Springer MONET Journal*, Special Issue on Networking in 5G Mobile Communications Systems: Key Technologies and Challenges, to appear. DOI: 10.1007/s11036-014-0565-0. (10 pages)

[E20] M. Chen, Y. Zhang, Y. Li, **S. Mao**, and V.C.M. Leung, "EMC: Emotion-aware mobile cloud computing in 5G," *IEEE Network*, Special Issue on Mobile Cloud Computing in 5G: Emerging Trends, Issues, and Challenges, to appear.

[E21] Y. Huang*, P.A. Walsh*, Y. Li, and **S. Mao**, "A distributed polling service-based MAC protocol testbed," *Wiley International Journal of Communication Systems*, vol.27, no.12, pp.3901-3921, Dec. 2014.

[E22] Y. Xu*, G. Yue, and **S. Mao**, "User grouping and load balancing for FDD massive MIMO systems," invited paper, *E-Letter of* IEEE Communications Society *Multimedia Communications Technical Committee (MMTC)*, Special Issue on Large-Scale MIMO, vol. 9, no. 6, pp.28-31, Nov. 2014.

[E23] M. Feng*, T. Jiang, D. Chen, and **S. Mao**, "Cooperative small cell networks: High capacity for hotspots with interference mitigation," *IEEE Wireless Communications*, Special Issue on Converged Mobile Networks, vol.21, no.6, pp.108-116, Dec. 2014.

[E24] Y. Xu*, G. Yue, and **S. Mao**, "User grouping for Massive MIMO in FDD systems: New design methods and analysis," *IEEE Access Journal*, Special Section on *5G Wireless Technologies: Perspectives of the Next Generation Mobile Communications and Networking*, vol.2, no.1, pp.947-959, Sept. 2014. DOI: 10.1109/ACCESS.2014.2353297.

[E25] H. Zhou*, **S. Mao**, and P. Agrawal, "On relay selection and power allocation in cooperative free space optical networks," *Springer Photonic Network Communications Journal* (PNET), vol.29, no.1, pp.1-11, Jan. 2015. (11 pages)

[E26] Y. Huang*, **S. Mao**, and R. M. Nelms, "Smooth scheduling for electric power scheduling in power distribution networks," *IEEE Systems Journal*, to appear. DOI: 10.1109/JSYST.2014.2340231. (12 pages)

CONFERENCE PUBLICATIONS (since 2015, my students are marked with *, totally 108)

[F1] Y. Xue, P. Zhou, T. Jiang, **S. Mao**, and X. Huang, "Distributed learning for multi-channel selection in wireless network monitoring," in *Proc. IEEE SECON 2016*, London U.K., June 2016.

[F2] J. Patrick*, L. Hong, and **S. Mao**, "Implementation and performance evaluation of cooperative wireless communications with beamforming and software defined radio techniques," in *Proc. ASEE Annual Conference 2016*, New Orleans, June 2016.

[F3] Z. He* and **S. Mao**, "A decomposition principle for link and relay selection in dual-hop 60 GHz networks," in *Proc. IEEE INFOCOM 2016*, San Francisco, CA, Apr. 2016. (9 pages)

[F4] M. Feng*, **S. Mao**, and T. Jiang, "BOOST: Base station on-off switching strategy for energy efficient massive MIMO HetNets," in *Proc. IEEE INFOCOM 2016*, San Francisco, CA, Apr. 2016. (9 pages)

[F5] X. Wang*, L. Gao*, and **S. Mao**, "PhaseFi: Phase fingerprinting for indoor localization with a deep learning approach," in *Proc. IEEE GLOBECOM 2015*, San Diego, CA, Dec. 2015.

[F6] Z. He*, **S. Mao**, S. Kompella, and A. Swami, "Minimum time length scheduling under blockage and interference in multi-hop mmWave networks," in *Proc. IEEE GLOBECOM 2015*, San Diego, CA, Dec. 2015. (**IEEE GLOBECOM 2015 Best Paper Award**)

[F7] C. Ni, M. Feng*, K. Luo, T. Jiang, and **S. Mao**, "Additive cancellation signal method for sidelobe suppression in NC-OFDM based cognitive radio systems," in *Proc. IEEE GLOBECOM 2015*, San Diego, CA, Dec. 2015.

[F8] Z. Jiang* and **S. Mao**, "Energy delay trade-off in cloud offloading for multi-core mobile devices," in *Proc. IEEE GLOBECOM 2015*, San Diego, CA, Dec. 2015.

[F9] Z. Jiang* and **S. Mao**, "Online channel assignment, transmission scheduling, and transmission mode selection in multi-channel full-duplex wireless LANs," invited paper, in *Proc. The 10th International Conference on Wireless Algorithms, Systems, and Applications* (WASA 2015), LNCS 9204, K. Xu and H. Zhu (Eds.), Qufu, China, Aug. 2015, pp. 243-252.

[F10] Y. Wang*, G. Cao, **S. Mao**, and R.M. Nelms, "Analysis of solar generation and weather data in smart grid with simultaneous inference of nonlinear time series," in *Proc. 2015 International Workshop on Smart Cities and Urban Informatics* (SmartCity 2015), in conjunction with IEEE INFOCOM 2015, Hong Kong, China, Apr. 2015, pp.672-677.

[F11] W.G. Blass*, A. Hennigar, and **S. Mao**, "Implementation of a software-defined radio based Global Positioning System repeater," in *Proc. 2015 ASEE Southeastern Section Annual Conference*, Gainesville, FL, Apr. 2015.

[F12] Y. Wang* and **S. Mao**, "Distributed power control in full duplex wireless networks," in *Proc. IEEE WCNC 2015*, New Orleans, LA, Mar. 2015. (6 pages)

[F13] Z. He*, **S. Mao**, and T.S. Rappaport, "Minimum time length link scheduling under blockage and interference in 60GHz networks," in *Proc. IEEE WCNC 2015*, New Orleans, LA, Mar. 2015. (6 pages)

[F14] M. Feng*, **S. Mao**, and T. Jiang, "Duplex mode selection and channel allocation for full-duplex cognitive femtocell networks," in *Proc. IEEE WCNC 2015*, New Orleans, LA, Mar. 2015. (6 pages)

[F15] X. Wang*, L. Gao*, **S. Mao**, and S. Pandey, "DeepFi: Deep learning for indoor fingerprinting using channel state information," in *Proc. IEEE WCNC 2015*, New Orleans, LA, Mar. 2015.

[F16] X. Wang*, H. Zhou*, **S. Mao**, S. Pandey, P. Agrawal, and D. Bevly, "Mobility improves LMI-based cooperative indoor localization," in *Proc. IEEE WCNC 2015*, New Orleans, LA, Mar. 2015. (6 pages)

PROFESSIONAL SERVICE (selected)

❑ **EDITORSHIP**

- Steering Committee Member, IEEE Transactions on Multimedia, June 2016 ~ present
- Area Editor, IEEE Internet of Things Journal, Oct. 2016 ~ present
- Member of the First Editorial Board, Journal of Communication and Information Networks, Dec. 2015 ~ present
- Associate Editor, IEEE Transactions on Multimedia, July 2015 ~ present
- Associate Editor, IEEE Multimedia, Aug. 2015 ~ present
- Associate Editor, Elsevier Digital Communications and Networks Journal, Sept. 2014 ~ present
- Editorial Board Member, IEEE Internet of Things Journal, July 2013 ~ Sept. 2016
- Director, IEEE Communications Society Multimedia Communications Technical Committee (MMTC) E-Letter, 2012 ~ 2014
- Editorial Board Member, IEEE Transactions on Wireless Communications, Jan. 2010 ~ June 2016
- Editorial Board Member, IEEE Communications Surveys & Tutorials, Aug. 2010 ~ present
- Area Editor, EAI Endorsed Transactions on Mobile Communications and Applications, Dec. 2008 ~ present

❑ **PROFESSIONAL COMMITTEE SERVICE**

- **Distinguished Lecturer**, IEEE Vehicular Technology Society, 2014 ~ 2018
- Chair, Multimedia Communications Technical Committee (MMTC), IEEE Communications Society, 2016 ~ 2018
- Member-at-Large, IEEE ComSoc GITC, 2016 ~ 2018

❑ **CONFERENCE ORGANIZING COMMITTEE** (since 2015)

- TPC Co-Chair, IEEE INFOCOM 2018
- Co-Chair, Next Generation Networking and Internet Symposium, IEEE ICC 2017
- Co-Chair, MAC and Cross-Layer Design Track, IEEE WCNC 2017
- Co-Chair, Next Generation Networking Symposium, IEEE ICCC 2016
- Area TPC Chair, IEEE INFOCOM 2017 & 2016
- Publicity Co-Chair, IEEE INFOCOM 2016
- Co-Chair, Next Generation Networking and Internet Symposium, IEEE ICC 2016
- TPC Co-Chair, The 23rd International Conference on Telecommunications (ICT 2016)
- Student Travel Grant Co-Chair, IEEE GLOBECOM 2015
- Co-Chair: IEEE GlobalSIP 2015 Symposium on Signal Processing in Mobile Multimedia Communication Systems
- Technical Program Vice Chair for Information Systems (EDAS), IEEE INFOCOM 2015
- Co-Chair: Next Generation Networking Symposium, IEEE ICC 2015
- Steering Committee Voting Member: IEEE International Conference on Multimedia and Expo (ICME), representing IEEE ComSoc, Jan. 1, 2014 ~ Dec. 31, 2015

❑ **CONFERENCE TECHNICAL PROGRAM COMMITTEE** (numerous, omitted for brevity)