Song Guo

PQ 818, Mong Man Wai Building, Department of Computing
The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong SAR
Phone: +852-2766-7259, Email: song.guo@polyu.edu.hk
Homepage: http://www.comp.polyu.edu.hk/~cssongguo/

Song Guo is a Full Professor and Associate Head at Department of Computing, The Hong Kong Polytechnic University. He also holds a Changjiang Chair Professorship awarded by the Ministry of Education of China. Prof. Guo is an IEEE Fellow (Computer Society), a Highly Cited Researcher (Clarivate Web of Science), and an ACM Distinguished Member.

His research interests are mainly in the areas of edge AI, big data, cloud computing, and IoT. He co-authored 4 books, co-edited 7 books, and published over 500 papers in major journals and conferences. He is the recipient of the 2019 IEEE TCBD Best Conference Paper Award, 2018 IEEE TCGCC Best Magazine Paper Award, 2017&2019 IEEE Systems Journal Annual Best Paper Award, and other 8 Best Paper Awards from IEEE/ACM conferences. His work was also recognized by the 2016 Annual Best of Computing: Notable Books and Articles in Computing in ACM Computing Reviews.

Prof. Guo is the Editor-in-Chief of IEEE Open Journal of the Computer Society and the Chair of IEEE Communications Society (ComSoc) Space and Satellite Communications Technical Committee. He was an IEEE ComSoc Distinguished Lecturer and a member of IEEE ComSoc Board of Governors. He has also served for IEEE Computer Society on Fellow Evaluation Committee, Transactions Operations Committee, Editor-in-Chief Search Committee, etc. Prof. Guo has been named on editorial board of a number of prestigious international journals like IEEE Transactions on Parallel and Distributed Systems, IEEE Transactions on Cloud Computing, IEEE Transactions on Emerging Topics in Computing, etc. He has also served as chairs of organizing and technical committees of many international conferences.

ACADEMIC QUALIFICATIONS

01-05	**Ph.D.**, Computer Science, University of Ottawa, Canada
95-98	**M.E.**, Computer Engineering, Beijing University of Posts and Telecommunications, China
91-95	**B.E.**, Computer Engineering, Huazhong University of Science and Technology, China

PROFESSIONAL EXPERIENCE

16-	Full Professor, The Hong Kong Polytechnic University
14-16	Full Professor, The University of Aizu, Japan
11-13	Senior Associate Professor, The University of Aizu, Japan
07-11	Associate Professor, The University of Aizu, Japan
06-07	Assistant Professor, University of Northern British Columbia, Canada
06	Postdoctoral Fellow, University of British Columbia, Canada
01-06	Co-founder and Chief Software Architect, Liska Biometry Inc. (Ottawa), Canada

AWARDS AND RECOGNITION

1.   2020 Highly Cited Researcher, Clarivate Web of Science

2. IEEE Fellow (Computer Society) for contributions to high performance and resilient distributed computing

3. Changjiang Chair Professor, Ministry of Education, China, 2020-2023

4. ACM Distinguished Member

5. Best Track Paper Award received in MSN 2020

6. Best Paper Award Runner Up received in ICPP 2020

7. Faculty Award for Outstanding Achievement in Research and Scholarly Activities 2019/20

8. 2020 Hong Kong Social Enterprise Competition Intellectual Property Ambassador Award, as supervisor

9. 2019 IEEE ComSoc TCBD Best Conference Paper Award

10. 2019 IEEE Systems Journal Best Paper Award, the IEEE Systems Council

11. 2019 第二届上海交大-卫宁健康智慧医疗挑战赛的全国总决赛一等奖, Heal Boys 团队—脊大夫无创伤脊柱三维评估系统

12. 2018 IEEE ComSoc TCGCC Best Magazine Paper Award

13. Best Student Paper Award received in ACIIDS 2018

14. 2017 IEEE Systems Journal Best Paper Award, the IEEE Systems Council

15. Paper "An efficient privacy-preserving ranked keyword search method" included in 21st Annual Best of Computing - Notable Books and Articles in Computing of 2016, ACM Computing Reviews, 2017

16. First Prize, ComSoc Student Competition 2016, as supervisor

17. Best Paper Award received in IEEE Globecom 2016

18. Best Paper Award received in IEEE TrustCom 2016

19. Best Paper Award received in 2016 Tohoku-Section Joint Convention of Institutes of Electrical and Information Engineers, Japan

20. Outstanding Leadership Award received in IEEE DataCom 2016

21. Best Paper Award received in ACM IMCOM 2014

22. Outstanding Service Award received in IEEE ICESS 2012

23. Best Paper Award received in IEEE CSE 2011

24. Outstanding Service Award received in IEEE ICESS 2010

25. The Award of 2008 Funai Foundation for Information Technology, Japan

26. Best Paper Award received in IEEE HPCC 2008

27. Outstanding Leadership Award received in IEEE ISPA 2008

28. NSERC Postdoctoral Fellowship Award, Canada, 2006

29. Ontario Graduate Scholarship, Canada, 2002-2005

30. Excellence Scholarship, University of Ottawa, 2001-2005

GRANTS

1. Project of Strategic Importance, Crowdsourced Mobile Video Analytics for Emerging Realtime Risk Management in Smart Cities, 2021-2022, PI, 2,000,000 HKD.

2. 深圳市科技創新委員會基礎研究重點項目, "Research on Cloud Edge Collaborative Learning Architecture and Key Optimization Theory", 2021-2023, PI, 2,500,000 CNY.

3. RGC General Research Fund (GRF), "Federated Learning with Non-IID Data over Resource-Constrained Mobile Edge Networks", 2021-2023, PI, 1,057,394 HKD.

4. Hong Kong Scholars Program, "Federated Learning over Resource-Constrained Mobile Edge Networks", 2021-2023, PI, 800,000 HKD.

5. NRC (Norwegian Research Council) INTPART (International Partnerships for Excellent Education and Research) Programme, "Transnational Partnership for Excellent Research and Education in Disruptive Technologies for a Resilient Future (DTRF)", 2020-2023, Co-PI.

6. RGC Research Impact Fund (RIF), "Edge Learning: the Enabling Technology for Distributed Big Data Analytics in Cloud-Edge Environment", 2020-2025, Project Coordinator (PC), 7,640,000 HKD.

7. Postdoctoral Fellowships Scheme, "Human Tracking with Embedded Sensors on Collaborative Multiple Smart Devices", 2020-2022, PI, 799,800 HKD.

8. Chinese National Engineering Research Centre (CNERC), "Data Analytics and Machine Learning Algorithms for Smart Transportation Systems", 2020-2021, PI, 500,000 HKD.

9. RGC General Research Fund (GRF), "Proactive and Cooperative Resource Allocation in Wide-scale Edges", 2020-2022, PI, 935,141 HKD.

10. Data Science & AI Lab, "The Enabling Technologies for Mutual Enhancement between Machine Learning and Communication at the Edge", 2019-2021, PI, 363,000 HKD.

11. Consultancy Project with Esquel Enterprises Limited, "Bitmap Conversion for Label Artwork Patterning", 2019-2020, PI, 156,000 HKD.

12. RGC Research Impact Fund (RIF), "Tackling Grand Challenges in Food Safety: A Big Data and IoT Enabled Approach", 2019-2024, Co-PI, 7,748,000 HKD.

13. RGC Collaborative Research Fund (CRF), "Multi-stage Big Data Analytics for Complex Systems: Methodologies and Applications", 2019-2022, Co-PI, 3,661,193 HKD.

14. Postdoctoral Fellowships Scheme, "Highly-Efficient Data Dissemination in Mobile Edge Computing Enabled Internet of Vehicles", 2019-2021, PI, 771,000 HKD.

15. Collaborative Research with Huawei Technologies Co., Ltd., "Ethernet Transport Network Performance Simulation", 2018-2019, PI, 771,150HKD.

16. NSFC (National Natural Science Foundation of China), General Research, "Edge Intelligence Oriented Resource Management and Deployment Optimization", 2019-2022, PI, 640,000 RMB.

17. Collaborative Research with Guilin Medical Group, "MioTChain", 2018 – 2019, PI, 1,000,270 HKD.

18. Ministry of Science and Technology (MoST) National Key Technologies R&D Programme on Big Data and Cloud Computing, "General-purpose Computer Technology and System for Graph-oriented Big Data Computing", 2018-2021, Co-I, 47,000,000 CNY.

19. Ministry of Science and Technology (MoST) National Key Technologies R&D Programme on Big Data and Cloud Computing, "Human-Machine-Things Integrated Cloud Computing Architecture and Platform", 2018-2021, Co-I, 25,000,000 CNY.

20. Shenzhen Basic Research Funding Scheme, "Task Scheduling of Multi-platform Computing Resources in Mobile Crowdsourcing Networks", 2018-2019, PI, 300,000 CNY.

21. Hong Kong Innovation and Technology Fund (ITF), "Big Data-Driven Airport Resources Management (BigARM) Engine and Application Tools", 2018-2019, Co-I, 6,500,000 HKD.

22. Collaborative Research with HK Interactive Lab Limited, "A Rating System for Crypto-Tokens on Block-chain based Platforms", 2018-2020, Co-I, 1,500,000 HKD.

23. 上海市 2018 年度科技创新行动计划港澳台科技合作项目, "基于云雾混合模式的智慧城市大数据处理技术研究", 2018-2021, Co-PI, 400,000 RMB.

24. NRC (Norwegian Research Council) INTPART (International Partnerships for Excellent Education and Research) Programme, "Transnational Partnership for Excellent Research and Education in Big Data and Emergency Management", 2017-2020, Co-PI, 5,700,000 NOK.

25. PolyU Internal Competitive Research Grant (CRG), "Optimized Request Admissions in NFV-Enabled Software-Defined Networks", 2017-2019, PI, 105,000 HKD.

26. PolyU Joint Supervision Scheme, "Bandwidth Guaranteed Virtual Network Function Placement on NUMA Machines", 2017-2018, PI, 154,500 HKD.

27. PolyU COMP Start-up Fund, "Self-adaptive Platform for Big Spatial-Temporal Data Analytics", 2016-2019, PI, 1,500,000 HKD.

28. JSPS (Japan Society for the Promotion of Science) Grant-in-Aid for Scientific Research, "A WiFi-based Survivor Tracking and Searching System for Disaster Environment", 2016-2017, PI, 20,000,000 JPY.

29. MIC (Ministry of Internal Affairs and Communication) Strategic Information and Communications Research and Development Promotion Program (SCOPE), "Living Activity and Health Tracking in Smart Home using RF Reflection and Big Data", PI (2016-2017), Co-PI (2017-2018), 35,000,000 JPY.

30. JST-NSF (Japan Science and Technology Agency and US National Science Foundation), Big Data for Disaster Management, "BDD: Dynamic Evolution of Smart-Phone Based Emergency Communications Network", 2015-2017, Co-PI, 30,000,000 JPY.

31. JST SIP (Cross-ministerial Strategic Innovation Promotion Program) on Enhancement of Societal Resiliency against Natural Disasters, 2015 – 2017, Co-I, 25,000,000 JPY.

32. MIC (Ministry of Internal Affairs and Communication) Strategic Information and Communications Research and Development Promotion Program (SCOPE), "Research and Development of Demand-Addressable Sensor Network", 2012-2014, Co-PI, 60,000,000 JPY.

33. Fukushima Revitalization Research Fund, "Development of a Resilient Information Management System Applicable under Network-isolated Environment", 2013 – 2014, PI, 10,000,000 JPY.

34. JSPS Grant-in-Aid for Scientific Research, "On Reliable, Secure and Energy-Efficient Computing in Distributed Wireless Sensor Networks", 2008-2010, PI, 5,000,000 JPY.

35. A3 Foresight Program funded by JSPS (Japan), NSFC (China) and NRF (Korea), 2012 – 2014, Co-I, 28,000,000 JPY.

36. NSFC (National Natural Science Foundation of China), General Research, "On Practical Network Coding Techniques for Wireless Networks", 2014-2016, Co-PI, 800,000 RMB.

37. NSFC (National Natural Science Foundation of China), General Research, "On Environment-Aware, Service-Adaptive and Energy-Efficient Technologies in Mobile Cognitive and Cooperative Communications", 2014-2016, Co-PI, 800,000 RMB.

38. Joint Research Fund of Olympus Corporation, "Context-Aware System Guaranteeing Quality of Service for a Wide Area", 2011-2013, PI, 10,000,000 JPY.

39. Grant-in-Aid for JSPS Fellows, "Theory and Key Technologies of Large-scale Mobile Wireless Mesh Sensor Networks", 2009-2011, Coordinator, 3,000,000 JPY.

40. University of Aizu Competitive Research Fund, 2008-2015, PI, 10,000,000 JPY.

41. Fukushima Revitalization Research Fund, "A Safe and Secure Situation-aware IoT System for Support of the Senior Citizen", 2012, Co-PI, 3,000,000 JPY.

42. University of Aizu Multi-Lab Research Fund, "New Algorithms/Protocols of Internet of Things and Their Applications to Smart Home/Town for Elderly People", 2011, Co-PI, 3,000,000 JPY.

43. Joint Research Fund of Olympus Corporation, "New Models of Grid and Ubiquitous Computing for Image Processing", 2008-2010, PI, 10,000,000 JPY.

44. Professional Development Fund, University of Northern British Columbia, 2006, 2,000 CAD.

45. NSERC Postdoctoral Research Fund, University of British Columbia, Canada, 2006, 27,000 CAD.

ACADEMIC ACTIVITIES

A. Professional Society

IEEE Fellow, IEEE Computer Society, 2020

ACM Distinguished Member, ACM, 2020

Member of Fellow Evaluation Committee, IEEE Computer Society, 2020

Member of Board of Governor, IEEE Communications Society, 2018-2019

Director of Membership Services, IEEE Communications Society, 2018-2019

Distinguished Lecturer, IEEE Communications Society, 2016-2017

Member of Marketing Standing Committee, IEEE Communications Society, 2018-

ACM Senior Member, 2012

Chair, IEEE COMSOC Technical Committee on Satellite and Space Communications (TCSSC), 2020-

Chair, IEEE SIG on Green Computing and Data Processing, 2017-

Vice Chair, IEEE COMSOC TC on Green Communications and Computing (TCGCC), 2017-2019

Secretory, IEEE COMSOC Technical Committee on Big Data (TCBD), 2015-

Member, Education Committee, IEEE Blockchain Initiative, 2018-2019

B. Panel Member

Engineering Panel, RGC (Research Grants Council), Hong Kong, 2017-

Member of China National Science and Technology Experts Database, 2018-

C. Editorial Board

Editor-in-Chief, IEEE Open Journal of the Computer Society (2020-2022)

Area Editor, IEEE Open Journal of the Communications Society (2019)

Associate Editor, IEEE Transactions on Parallel and Distributed Systems (2011-2015)

Associate Editor, IEEE Transactions on Cloud Computing (2018-)

Associate Editor, IEEE Transactions on Emerging Topics in Computing (2014-2018)

Associate Editor, IEEE Transactions on Sustainable Computing (2017-)

Associate Editor, IEEE Transactions on Green Communications and Networking (2016-)

Editor, IEEE Internet of Things Journal (2020-)

Editor, IEEE Network Magazine (2018-)

Series Editor, IEEE Communications Magazine (2016-2018)

Guest Editor, IEEE Transactions on Industrial Informatics (2019)

Guest Editor, IEEE Journal on Selected Areas in Communications (2018)

Guest Editor, IEEE Cloud Computing (2017)

Guest Editor, IEEE Internet of Things Journal (2016)

Guest Editor, IEEE Network Magazine (2016)

Associate Editor, SN Computer Science (2019-)

Editor, Wireless Networks - Springer (2013-)

International Members of the Editorial Committee, Application of Electronic Technique, National Computer System Engineering Research Institute of China (2018-)

Area Editor, EAI Transactions on Industrial Networks and Intelligent Systems (2014-)

Area Editor, EAI Transactions on Collaborative Computing (2015-)

Area Editor, International Journal of Communication Networks and Information Security (2012-)

Editor, International Journal of Parallel, Emergent and Distributed Systems (2013-)

Editor, Wireless Communications and Mobile Computing – Wiley (2011-2017)

Editor, International Journal of Distributed Sensor Networks (2013-2018)

Editor, International Journal of Engineering Business Management (2013-2016)

Editor, Human-centric Computing and Information Sciences (2012-2018)

Editor, Ad Hoc & Sensor Wireless Networks (2010-2015)

Editor, International Journal of Antennas and Propagation (2014-2018)

INVITED TALKS

1. Tutorial, "Edge Learning for Distributed Big Data Analytics: Theory, Algorithm and System Design", the 22nd International Conference on Distributed Computing and Networking (ICDCN), January 2021.

2. Distinguished Lecturer Talk, IEEE VTS Nanjing Chapter, December 2020.

3. Keynote, the 8th International Conference on Information Technology: IoT and Smart City (ICIT), December 2020.

4. Invited talk, 2020 Canberra Artificial Intelligence Summer School - "Artificial Intelligence is For Everyone", December 2020.

5. Keynote, 2020 University Alliance of the Silk Road (USAR) Workshop on Security for Cyber Space, Xi'an Jiao Tong University, November 2020.

6. Keynote, "Deep Reinforcement Learning-Empowered Blockchain: Security Challenges and Solutions", Mainland-Hong Kong research forum on the Advances in Cybersecurity, October 2020.

7. Keynote, "边缘学习与智慧城市: 从云端到边缘", CNCC 技术论坛「5G 边缘智能与智慧城市」, October 2020

8. Keynote, CCF 第 11 届服务计算学术会议与第 13 届服务科学国际会议, 主题论坛一：互联网服务, August 2020

9. Keynote, CCF 全国计算机体系结构学术年会《边缘智能与未来体系结构》论坛, August 2020

10. Keynote, IEEE INFOCOM Workshop on Intelligent Cloud Computing and Networking (ICCN), Beijing, China, July 2020

11. Keynote, "突破智能瓶颈：基于边缘计算的联邦学习挑战与展望", CCF YOCSEF 深圳线上论坛—联邦学习：人工智能的最后一公里, March 2020

12. Keynote, International Conference on Blockchain and Trustworthy Systems (BlockSys), Guangzhou, China, December 2019

13. Keynote, IEEE Globecom Workshop on Intelligent and Cognitive Space, Terrestrial and Ocean Internet, Systems and Applications, Waikoloa, USA, December 2019

14. Invited talk, 武汉大学人工智能研究院成立大会暨人工智能国际学术研讨会, Wuhan, China, November 2019

15. Invited talk, Ping An Technology, Shenzhen, China, October 2019

16. Invited talk, Workshop on Big Data for Emergency Management (BDEM 2019), Sogndal, Norway, October 2019

17. Invited talk, Beijing University of Posts and Telecommunications, Beijing, China, October 2019

18. Keynote,天津大学 2019 智能时代的网络安全及未来网络研讨会, Tianjing, China, August 2019

19. Keynote, International Workshop on Intelligent Networks and Edge Computing (INEC), Sun Yat-sen University, Guangzhou, August 2019

20. Invited Talk, Xidian University, July 2019

21. Invited Talk, Xi'an Jiaotong University, July 2019

22. Keynote, International Conference on Data Science and Information Technology (DSIT), Seoul, Korea, July 2019

23. Keynote, 12th EAI International Conference on Mobile Multimedia Communications (MOBIMEDIA 2019), Weihai, China, June 2019

24. Invited Talk, Macquarie University, May 2019

25. Invited Talk, Deakin University, May 2019

26. Keynote, International Conference on Advances in Computer Technology, Information Science and Communications (CTISC), Xiamen, China, March 2019

27. Keynote, Future Internet Forum 2019 (FIF 2019), Dalian, China, January 2019

28. Keynote, International Conference on Information Technology (ICIT), Hong Kong, December 2018

29. Keynote, BUPT Information Technology International Forum for Young Scholars (北京邮电大学信息科技国际青年学者论坛), Beijing, China, December 2018

30. Keynote, IEEE International Workshop on Future Network Computing (FNC), Changsha, China, October 2018

31. Invited Talk, 中南大学信息科学与工程学院计算机网络先进技术论坛, Changsha, China, October 2018

32. Keynote, IEEE International Conference on Cloud and Big Data Computing (CBDCom), Guangzhou, China, October 2018

33. Keynote, International Conference on Data Science and Information Technology (DSIT), Singapore, July 2018

34. Keynote, International Conference on Mobile Multimedia Communications (MobiMedia), Qingdao, China, June 2018

35. Keynote, International Workshop on Future Advanced Networks Technology (FANT'18), Shanghai, China, May 2018

36. Keynote, International Conference on Information Science and System (ICISS), Jeju Island, South Korea, April 2018

37. Panellist, IEEE HPCC/SmartCity/DSS, Bangkok, Thailand, December 2017

38. Keynote, International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (QShine), Dalian, China, December 2017

39. Invited Talk, Forum on Frontier Technology of Data-center and System Software, HUST, Wuhan, December 2017

40. Invited Talk, Forum on Frontier Technology of Internet Plus, CUG, Wuhan, December 2017

41. Keynote, Big Data and Networking, Aizuwakamatsu, Japan, November 2017

42. Invited Talk, Forum on Future Computing, Shanghai, China, August 2017

43. Distinguished Lecturer Talks, "Cross-Cloud Resource Management for Big Data" and "Device-to-Device Communication in Cellular Networks", Universidad Privada Boliviana, Diego Portales University, University of Chile, August 2017

44. Keynote, "Learning based Quality-aware Crowdsourcing", 2017 Cross-Strait Research Forum, Beijing, China, July 2017

45. Distinguished Lecturer Talks, "Device-to-Device Communication in Cellular Networks", Auckland University of Technology, Victoria University of Wellington, Massey University, University of Canterbury, New Zealand, July 2017

46. Invited Talk, Hosei University, Tokyo, Japan, November 2016

47. Invited Talk, Forum on Future Computing, Chengdu, China, August 2016

48. Panellist, "Evolution of Cyber-Physical Systems", IEEE CyberSciTech/DASC/PICom/ DataCom 2016, Auckland, New Zealand, August 2016

49. Keynote, "Traffic-aware Geo-distributed Big Data Analytics with Predictable Performance", IEEE 2016 CyberSciTech/DASC/PICom/DataCom, Auckland, New Zealand, August 2016

50. Keynote, "Vehicle-Assisted Disaster Management", International Workshop on Vehicular Networks and Smart Cities, Shanghai, China, June 2016

51. Invited Talk, "Protection of Big Data Privacy", International Forum on Cyber Security, Beijing, China, June 2016

52. Invited Talk, Beijing University of Posts and Telecommunications, Beijing, China, January 2016

53. Invited Talk, Nanjing University, Nanjing, China, January 2016

54. Keynote, "False-name-proof Auctions for Cloud Resource Allocation", IEEE SmartCity/SocialCom/SustainCom-2015 International Conferences, Chengdu, China, December 2015

55. Keynote, "ALETHEIA: Robust Large-Scale Spectrum Auctions against False-name Bids", International Workshop on Emerging Technologies in Mobile Computing and Wireless Communication, Chongqing, China, October 2015

56. Keynote, CCF Technical Committee on Computer Applications Annual Conference, Maoming, China, August 2015

57. Keynote, International Workshop on Network Computing and Data Management, Dalian, China, July 2015

58. Invited Talk, Jinan University, Guangzhou, China, July 2015

59. Invited Talk, Aizu IT AKI Forum, Aizu-Wakamatsu, Japan, October 2014

60. Keynote, International Workshop on Future Trends of Big Data, Systems, and Networking, Melbourne, Australia, September 2014

61. Invited Talk, Huazhong University of Science and Technology, Wuhan, China, September 2014

62. Keynote, CCF Technical Committee on Open Systems Annual Conference, Xiangyang, China, September 2014

63. Invited Presentation, IEEE International Conference on Computer Communications and Networks, Nassau, Bahamas, July 2013

64. Invited Talk, Forum on Future Computing, Shanghai, China, April 2013

65. Invited Presentation, International Conference on Computing, Networking and Communications, San Diego, USA, January 2013

66. Invited Talk, Central South University, Changsha, China, November 2011

67. Invited Talk, University of New South Wales, Canberra Campus, Australia, June 2011

68. Invited Talk, ACM Asia-Pacific Symposium on Internetware, Suzhou, China, November 2010

69. Invited Talk, Nanjing University, Nanjing, China, May 2010

SERVICES FOR CONFERNECES

A. Organizing Committee

2022	General Chair: IEEE VTC Spring
2020	General Chair: ACM CCRIS, ACM CVCM, CLOUD, ComComAp
2020	Program Chair: IEEE/CIC ICCC, IEEE ICPADS, IEEE ICFC
2020	Symposium Chair: IEEE ICNC
2019	General Chair: IEEE/ACM IC2E, CTISC, DSIT
2019	Workshop Chair: IEEE INFOCOM
2018	General Chair: DSIT
2018	Program Chair: IEEE iSCI, 5GU
2018	Symposium Co-Chair: IEEE ICC, IEEE ICNC
2018	Workshop Chair: IEEE INFOCOM
2017	General Chair: IEEE BigDataSE, IEEE CyberSciTech

2017	Program Chair: IEEE FCST
2017	Workshop Chair: IEEE MASS
2017	Poster Chair: IEEE SRDS
2017	Symposium Co-Chair: IEEE GlobeCom, WCSP
2016	General Chair: IEEE FCST, TridentCom, BIGDATACPS, Big Data and Networking, ICITEL, IEEE DSE (in conjunction with ICPP)
2016	Program Chair: IEEE DataCom, IEEE HPCC, IEEE BDSTA (in conjunction with INFOCOM)
2016	Symposium Chair/Co-Chair: IEEE ICC, IEEE ICNC, IEEE ICCC, ICACCI
2016	Track Chair/Co-Chair: IEEE VTC, 3PGCIC
2016	Workshop Chair: IEEE WiMob, ICACCI
2015	General Chair: IEEE INISCOM, IEEE CollaborateCom
2015	Symposium Co-Chair: IEEE GlobeCom, IEEE TENSYMP
2015	Track Chair/Co-Chair: IEEE BigDataService
2015	Publicity Chair: IEEE WCNC
2014	General Chair: IEEE NEST
2014	Program Chair: IEEE PSATS, IEEE AdHocNow, IEEE Cloud-CPS
2014	Symposium Chair: ChinaCom
2013	General Chair: MobiQuitous, IEEE NEST
2013	Program Chair: IEEE MSN, MUSIC
2013	Publication Chair: IEEE MCSoC
2012	General Chair: IEEE NEST
2012	Program Vice-Chair: IEEE AINA
2012	Publication Chair: IEEE MCSoC
2011	Program Chair/Co-Chair: IEEE/IFIP EUC, LOCALGOS
2011	Publicity Chair, IEEE iCAST
2010	Program Co-Chair: PDCAT
2010	Publicity Co-Chair: IEEE ICESS
2009	Program Co-Chair: IEEE FCST
2008	General Chair: IEEE MASSN, IEEE UWMN
2008	International Liaison Co-Chair: IEEE ICYCS

B. Program Committee

2019	ICDCS, CCR, ICME, ICC
2018	INFOCOM, DataCom, IWCMC, Globecom, WiSEE, ASMSSPSC
2017	INFOCOM, ICC, WCNC, APCC, ICCCN, SPECTS
2016	INFOCOM, ICDCS, PerCom, Globecom, ICC, WCNC, ICCCN, CCECE, ICNC, FiCloud, WASA, ITC, SDDCS, BigSecurity, BigdataService
2015	INFOCOM, ICDCS, ICC, FiCloud, ICCCN, WCNC, APCC, ICCC, ITNAC, ComManTel, SDDCS, BigSecurity, ICPADS, TrustCom

2014	INFOCOM, Globecom, HPCC, GPC, WCNC, ATNAC, MCSoC, BigSecurity, NFSP, MobiPST, AsiaJCIS
2013	INFOCOM, Globecom, PIMRC, ICNC, WCNC, ICACCI, IWCMC, CNIT, SCPA, NFSP
2012	INFOCOM, VTC, WCNC, PIMRC, MASS, IWCMC, ICCC, ICCVE, MobiHealth, MUSIC, NFSP, MUE, MSN
2011	MASS, WCNC, PIMRC, UIC, RACS, DCOSS, IWCMC, ACC, ICIS, CISIS, PECCS, PESARO, MultiStreams, DSPSR, MobiHealth, PEWiN
2010	WCNC, PIMRC, UIC, EUC, TSP, MCSoC, ICISTM, LOCALGOS, AEWiNS, ICESS, NBiS, CUTE, ISAC, P2Pnet, ICIS, WiNA, ICISTM
2009	PIMRC, UIC, TSP, SNPD, MCSoC, ICIS, LOCALGOS, ICESS, FOWANC, CSE, PAEWN, PEWiN, ICUT, ScalCom, WiNA, ICISTM
2008	WCNC, EUC, TSP, ChinaCom, MCSoC, ICISTM, MODENETs
2007	Globecom, MSN, SNPD

TEACHING

Semester	Course	Title	University	Level
06-07	CPSC 100	Computer Programming	UNBC	Junior
06-07	CPSC 622	Database Systems	UNBC	Graduate
06-07	CPSC 643	Mobile Computing	UNBC	Graduate
06-07	CPSC 250	Applied Business Computing	UNBC	Junior
08-16	F6	Operating Systems	Uaizu	Senior
08-16	N5	Performance Evaluation	Uaizu	Senior
09-10	SE6	Distributed Computing	Uaizu	Senior
10-16	CNA03	Wireless and Mobile Networks	Uaizu	Graduate
10-16	CNA04	Performance Evaluation of Network Systems	Uaizu	Graduate
09-15	SYA12	Best Practices in Embedded Software Development	Uaizu	Graduate
13-16	CNC03	Selected Topics of Future Internet	Uaizu	Graduate
14-16	RPW	Research Paper Writing Seminar	Uaizu	Graduate
16-18	COMP2411	Database Systems	PolyU	Junior
17-18	COMP2121	E-Business	PolyU	Junior
16-20	COMP4434	Big Data Analytics	PolyU	Senior
20-	COMP6434	Big Data Analytics and Artificial Intelligence	PolyU	Doctoral

ADVISING

Post-doc Fellows: 10+
PhD Students: 20+
Master Students: 30+
Undergraduate Students: 50+

DEPARTMENT/UNIVERSITY SERVICES

19-	Associate Head, Department of Computing, Hong Kong PolyU
19-	Member of Department Management Committee, Hong Kong PolyU
19-	Member of Faculty Staffing Committee, Hong Kong PolyU
17-19	Member of Department Staffing Committee, Hong Kong PolyU
17-	Member of Department Research Committee, Hong Kong PolyU
16-17	Chair of Department Research Committee, Hong Kong PolyU
16-17	Member of Department Heads Group, Hong Kong PolyU
16-17	Member of Faculty Research Committee, Hong Kong PolyU
16-17	Member of Department Management Committee, Hong Kong PolyU
16-17	Director, Research Club, Challengers Program, COMP, Hong Kong PolyU
15-16	Leader, University Strategic Research Project on Internet-of-Things, UAizu
14-16	Member of Graduate School Academic Affairs Committee, UAizu
14-16	Member of Super Global University Program Committee, UAizu
12-16	Member of Graduate School Entrance Examination Committee, UAizu
12-15	Member of Working Group for Internationalization, UAizu
12-15	Director, WG of Faculty Colloquium on Collaborative Research Excellence, UAizu
10-12	Member of Health and Welfare Guidance Committee, UAizu
09-13	Representative of Joint Research Program with Olympus Future Creation Laboratory
09-16	Founder and Representative of Joint Lab, UAizu and Nanjing University
15-16	Coordinator, Partnership between UAizu and Temple University
09-16	Coordinator, Partnership between UAizu and Shanghai Jiao Tong University
09-16	Coordinator, Partnership between UAizu and Nanjing University
09-16	Coordinator, Partnership between UAizu and Huazhong University of Science and Technology with Double Degree Program
09-16	Coordinator, Partnership between UAizu and National Chi Nan University
09-16	Coordinator, Partnership between UAizu and Chaoyang University of Technology
06-07	Member of Graduate Studies Committee, University of Northern British Columbia

PUBLICATIONS

A. Books

1. Deze Zeng, Lin Gu, Shengli Pan, and Song Guo, Software Defined Systems: Sensing, Communication and Computation, SpringerBriefs in Computer Science, 1st ed. 2020 edition (December 31, 2019), ISBN-13: 978-3030329419.

2. Song Guo and Deze Zeng (Eds.), *Cyber-Physical Systems: Architecture, Security and Application*, Book Series of EAI/Springer Innovations in Communication and Computing, 2019.

3. Song Guo, Guiyi Wei, Yang Xiang, Xiaodong Lin, and Psacal Lorenz (Eds.), *Testbeds and Research Infrastructures for the Development of Networks and Communities*, TridentCom 2016, Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, Volume 177, 2017.

4.   Shui Yu and Song Guo (Eds.), *Big Data Concepts, Theories, and Applications*, Springer 2016, ISBN 978-3-319-27761-5.

5.   Lin Gu, Deze Zeng, and Song Guo, *Cloud Networking for Big Data*, Springer 2015, ISBN 978-3-319-24718-2.

6.   Peng Li and Song Guo, *Cooperative Device-to-Device Communication in Cognitive Radio Cellular Networks*, Springer 2014, ISSN 2191-5768.

7.   Song Guo and Xiaofei Liao (Eds.), *Collaborative Computing: Networking, Applications, and Worksharing*, CollaborateCom 2015 Proceedings, Springer 2015.

8.   Song Guo, Jaime Lloret, Pietro Manzoni, and Stefan Ruehrup (Eds.), *Ad-hoc, Mobile, and Wireless Networks*, ADHOC-NOW 2014 Proceedings, Lecture Notes in Computer Science Volume 8487, 2014.

9.   Ivan Stojmenovic, Zixue Cheng, and Song Guo (Eds.), *Mobile and Ubiquitous Systems: Computing, Networking, and Services*, MobiQuitous 2013, Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering Volume 131, 2013.

10.   Song Guo (Ed.), *Advanced Wireless LAN*, ISBN: 978-953-51-0645-6, InTech, 2012.

B. Refereed Journal Papers

1.   Xin Xie, Xiulong Liu, Heng Qi, Song Guo, and Keqiu Li, "A Tag-correlation-based Approach to Fast Identification of Group Tags", *IEEE Transactions on Mobile Computing*, accepted.

2.   Zhaolong Ning, Peiran Dong, Xiaojie Wang, Xiping Hu, Song Guo, Tie Qiu, Bin Hu, Lei Guo, and Ricky Y. K. Kwok, "Distributed and Dynamic Service Placement in Pervasive Edge Computing Networks", *IEEE Transactions on Parallel and Distributed Computing*, DOI: 10.1109/TPDS.2020.3046000.

3.   Huawei Huang, Wei Kong, Sicong Zhou, Zibin Zheng, and Song Guo, "A Survey of State-of-the-Art on Blockchains: Theories, Modelings, and Tools", *ACM Computing Surveys*, accepted.

4.   Yu Ma, Weifa Liang, Meitian Huang, Wenzheng Xu, and Song Guo, "Virtual Network Function Service Provisioning in MEC via Trading Off the Usages between Computing and Communication Resources", *IEEE Transactions on Cloud Computing*, DOI: 10.1109/TCC.2020.3043313.

5.   Haozhao Wang, Zhihao Qu, Song Guo, Xin Gao, Ruixuan Li, and Baoliu Ye, "Intermittent Pulling with Local Compensation for Communication-Efficient Distributed Learning", *IEEE Transactions on Emerging Topics in Computing*, DOI: 10.1109/TETC.2020.3043300.

6.   Xiao Liu, Zaiyang Tang, Peng Li, Song Guo, Xuepeng Fan, and Jinbo Zhang, "A Graph Learning based Approach for Identity Inference in DApp Platform Blockchain", *IEEE Transactions on Emerging Topics in Computing*, DOI: 10.1109/TETC.2020.3027309.

7.   Jinlong Sun, Fan Liu, Yuzhi Zhou, Guan Gui, Tomoaki Ohtsuki, Song Guo, and Fumiyuki Adachi, "Surveillance Plane Aided Air-Ground Integrated Vehicular Networks: Architectures, Applications, and Potential", *IEEE Wireless Communications*, DOI: 10.1109/MWC.001.2000079.

8.   Xuan Liu, Zhong Xi, Juan Luo, Shigeng Zhang, and Song Guo, "Fast and Reliable Dynamic Tag Estimation in Large-Scale RFID Systems", *IEEE Internet of Things Journal*, DOI: 10.1109/JIOT.2020.3015943.

9.   Qi Qi, Runye Shen, Jingyu Wang, Haifeng Sun, Song Guo, and Jianxin Liao, "Spatial-Temporal Learning Based Artificial Intelligence for IT Operations in Edge Network", *IEEE Network Magazine*, accepted.

10.   Xiaojie Wang, Zhaolong Ning, Song Guo, and Lei Wang, "Imitation Learning Enabled Task Scheduling for Online Vehicular Edge Computing", *IEEE Transactions on Mobile Computing*, DOI: 10.1109/TMC.2020.3012509.

11. Yu Ma, Weifa Liang, Jing Li, Xiaohua Jia, and Song Guo, "Mobility-Aware and Delay-Sensitive Service Provisioning in Mobile Edge-Cloud Networks", *IEEE Transactions on Mobile Computing*, DOI: 10.1109/TMC.2020.3006507.

12. Chao Fang, Changtong Liu, Zhuwei Wang, Yang Sun, Wei Ni, Peng Li, and Song Guo, "Cache-Assisted Content Delivery in Wireless Networks: A New Game Theoretic Model", *IEEE Systems Journal*, DOI: 10.1109/JSYST.2020.3001229.

13. Haipeng Yao, Chao Qiu, Xiaofei Wang, Haipeng Yao, Jianbo Du, Richard F. Yu, and Song Guo, "Networking Integrated Cloud-Edge-End in IoT: A Blockchain-Assisted Collective Learning Approach", *IEEE Internet of Things Journal*, DOI: 10.1109/JIOT.2020.3007650.

14. Shigeng Zhang, Xuan Liu, Yangyang Liu, Bo Ding, Song Guo, and Jianxin Wang, "Accurate Respiration Monitoring for Mobile Users with Commercial RFID Devices", *IEEE Journal on Selected Areas in Communications*, DOI: 10.1109/JSAC.2020.3020604.

15. Sahil Garg, Kuljeet Kaur, Georges Kaddoum, and Song Guo, "SDN-NFV Aided Edge-Cloud Interplay for 5G-Envisioned Energy Internet Ecosystem", *IEEE Network Magazine*, accepted.

16. Jingcai Guo and Song Guo, "A Novel Perspective to Zero-shot Learning: Towards an Alignment of Manifold Structures via Semantic Feature Expansion", *IEEE Transactions on Multimedia*, DOI: 10.1109/TMM.2020.2984091.

17. Xuan Song, Haoran Zhang, Rajendra Akerkar, Huawei Huang, Song Guo, Lei Zhong, Yusheng Ji, Andreas L. Opdahl, Hemant Purohit, Andre Skupin, Akshay Pottathil, and Aron Culotta, "Big Data and Emergency Management: Concepts, Methodologies, and Applications", *IEEE Transactions on Big Data*, DOI: 10.1109/TBDATA.2020.2972871.

18. Chao Qiu, Haipeng Yao, Chunxiao Jiang, Song Guo, and Fangmin Xu, "Cloud Computing Assisted Blockchain-Enabled Internet of Things", *IEEE Transactions on Cloud Computing*, DOI: 10.1109/TCC.2019.2930259.

19. Meitian Huang, Weifa Liang, Yu Ma, and Song Guo, "Maximizing Throughput of Delay-Sensitive NFV-Enabled Request Admissions via Virtualized Network Function Placement", *IEEE Transactions on Cloud Computing*, DOI: 10.1109/TCC.2019.2915835.

20. Haipeng Yao, Bo Zhang, Peiying Zhang, Sheng Wu, Chunxiao Jiang, and Song Guo, "RDAM: A Reinforcement Learning Based Dynamic Attribute Matrix Representation for Virtual Network Embedding", *IEEE Transactions on Emerging Topics in Computing*, DOI: 10.1109/TETC.2018.2871549.

21. Jiahui Yu, Kun Wang, Peng Li, and Song Guo, "Efficient Trustworthiness Management for Malicious User Detection in Big Data Collection", *IEEE Transactions on Big Data*, DOI: 10.1109/TBDATA.2017.2761386.

22. Kun Wang, Jiahui Yu, Xiulong, Liu, Song Guo, "A Pre-Authentication Approach to Proxy Re-encryption in Big Data Context", *IEEE Transactions on Big Data*, DOI: 10.1109/TBDATA.2017.2702176.

23. Xiaofei Luo, Huawei Huang, Peng Li, and Song Guo, "Cost-Efficient Service Provisioning for Mobile Applications in Cloudlet Networks", *Journal of Sustainability*, accepted.

24. Qihua Zhou, Song Guo, Zhihao Qu, Peng Li, Li Li, Minyi Guo, and Kun Wang, "Petrel: Heterogeneity-aware Distributed Deep Learning via Hybrid Synchronization", *IEEE Transactions on Parallel and Distributed Computing*, vol. 32, no. 5, May 2021, pp. 1030-1043.

25. Qihua Zhou, Kun Wang, Haodong Lu, Wenyao Xu, Yanfei Sun, and Song Guo, "Canary: Decentralized Distributed Deep Learning via Gradient Sketch and Partition in Multi-interface Networks", *IEEE Transactions on Parallel and Distributed Computing*, vol. 32, no. 4, April 2021, pp. 900-917.

26. Xiaojie Wang, Zhaolong Ning, and Song Guo, "Multi-agent Imitation Learning for Pervasive Edge Computing: A Decentralized Computation Offloading Algorithm", *IEEE Transactions on Parallel and Distributed Computing*, vol. 32, no. 2, February 2021, pp. 411-425.

27. Qihua Zhou, Song Guo, Haodong Lu, Li Li, Minyi Guo, Yanfei Sun and Kun Wang, "Falcon: Addressing Stragglers in Heterogeneous Parameter Server via Multiple Parallelism", *IEEE Transactions on Computers*, vol. 70, no. 1, January 2021, pp. 139-155.

28. Huawei Huang, Song Guo, Weifa Liang, Kun Wang, and Yasuo Okabe, "Coflow-like Online Data Acquisition from Low-Earth-Orbit Datacenters", *IEEE Transactions on Mobile Computing*, vol. 19, no. 12, December 2020, pp. 2743-2760.

29. Song Guo, Deze Zeng, and Shifu Dong, "Pedagogical Data Analysis via Federated Learning Toward Education 4.0", *American Journal of Education and Information Technology*, vol. 4, no. 2, December 2020, pp. 56-65.

30. Sicong Zhou, Huawei Huang, Wuhui Chen, Pan Zhou, Zibin Zheng, Song Guo, "PIRATE: A Blockchain-based Secure Framework of Distributed Machine Learning in 5G Networks", *IEEE Network Magazine*, vol. 34, no. 6, November/December 2020, pp. 84-91.

31. Lin Gu, Jie Hu, Deze Zeng, Song Guo, and Hai Jin, "Service Function Chain Deployment and Network Flow Scheduling in Geo-distributed Data Centers", *IEEE Transactions on Network Science and Engineering*, vol. 7, no. 4, October-December 2020, pp. 2587-2597.

32. Wenchen He, Shaoyong Guo, Song Guo, Xuesong Qiu, and Feng Qi, "Joint DNN Partition Deployment and Resource Allocation for Delay-Sensitive Deep Learning Inference in IoT", *IEEE Internet of Things Journal*, vol. 7, no. 10, October 2020, pp. 9241-9254.

33. Baichuan Liu, Weikun Zhang, Wuhui Chen, Huawei Huang, and Song Guo, "Online Computation Offloading and Traffic Routing for UAV Swarms in Edge-Cloud Computing", *IEEE Transactions on Vehicular Technology*, vol. 69, no. 8, August 2020, pp. 8777-8791.

34. Xiaoming He, Kun Wang, Huawei Huang, Yixuan Wang, and Song Guo, "Green Resource Allocation based on Deep Reinforcement Learning in Content-Centric IoT", *IEEE Transactions on Emerging Topics in Computing*, vol. 8, no. 3, July-September 2020, pp. 781-796.

35. Xiaoming He, Kun Wang, Haodong Lu, Wenyao Xu, and Song Guo, "Edge QoE: Intelligent Big Data Caching via Deep Reinforcement Learning", *IEEE Network Magazine*, vol. 34, no. 4, July/August 2020, pp. 8-13.

36. Shiheng Ma, Song Guo, Kun Wang, Weijia Jia, and Minyi Guo, "A Cyclic Game for Service-Oriented Resource Allocation in Edge Computing", *IEEE Transactions on Services Computing*, vol. 13, no. 4, July/August 2020, pp. 723-734.

37. Yufeng Zhan, Peng Li, Zhihao Qu, Zeng Zeng, and Song Guo, "A Learning-based Incentive Mechanism for Federated Learning", *IEEE Internet of Things Journal*, vol. 7, no. 7, July 2020, pp. 6360-6368.

38. Miao Du, Kun Wang, Yinqiu Liu, Kai Qian, Yanfei Sun, Wenyao Xu, and Song Guo, "Spacechain: A Three-Dimensional Blockchain Architecture for IoT Security", *IEEE Wireless Communications Magazine*, vol. 27, no. 3, June 2020, pp. 38-45.

39. Xiaoming He, Haodong Lu, Huawei Huang, Yingchi Mao, Kun Wang, and Song Guo, "QoE-based Cooperative Task Offloading with Deep Reinforcement Learning in Mobile Edge Networks", *IEEE Wireless Communications Magazine*, vol. 27, no. 3, June 2020, pp. 111-117.

40. Haipeng Yao, Huiwen Liu, Peiying Zhang, Sheng Wu, Chunxiao Jiang, and Song Guo, "A Learning-Based Approach to Intra-Domain QoS Routing", *IEEE Transactions on Vehicular Technology*, vol. 69, no. 6, June 2020, pp. 6718-6730.

41. Haipeng Yao, Sihan Ma, Jingjing Wang, Peiying Zhang, Chunxiao Jiang, and Song Guo, "A Continuous-Decision Virtual Network Embedding Scheme Relying on Reinforcement Learning", *IEEE Transactions on Network and Service Management*, vol. 17, no. 2, June 2020, pp. 864-875.

42. Yufeng Zhan, Song Guo, Peng Li, and Jiang Zhang, "A Deep Reinforcement Learning based Offloading Game in Edge Computing", *IEEE Transactions on Computers*, vol. 69, no. 6, June 2020, pp. 883-893.

43. Xiangming Zhu, Chunxiao Jiang, Linling Kuang, Zhifeng Zhao, and Song Guo, "Two-Layer Game Based Resource Allocation in Cloud Based Integrated Terrestrial-Satellite Networks", *IEEE Transactions on Cognitive Communications and Networking*, vol. 6, no. 2, June 2020, pp. 509-522.

44. Zhuwei Wang, Yu Gao, Chao Fang, Song Guo, and Peng Li, "Optimal Connected Cruise Control With Arbitrary Communication Delays", *IEEE Systems Journal*, vol. 14, no. 2, June 2020, pp. 2913-2924.

45. Yufeng Zhan, Peng Li, Kun Wang, Song Guo, and Yuanqing Xia, "Big Data Analytics by CrowdLearning: Architecture and Mechanism Design", *IEEE Network Magazine*, vol. 34, no. 3, May/June 2020, pp. 143-147.

46. Shaoyong Guo, Yao Dai, Song Guo, Xuesong Qiu, and Feng Qi, "Blockchain Meets Edge Computing: Stackelberg Game and Double Auction based Task Offloading for Mobile Blockchain", *IEEE Transactions on Vehicular Technology*, vol. 69, no. 5, May 2020, pp. 5549-5561.

47. Zhe Quan, Zhi-Jie Wang, Ting Ye, and Song Guo, "Task Scheduling for Energy Consumption Constrained Parallel Applications on Heterogeneous Computing Systems", *IEEE Transactions on Parallel and Distributed Systems*, vol. 31, no. 5, May 2020, pp. 1165-1182.

48. Peng Li, Song Guo, Shui Yu, and Weihua Zhuang, "Cross-cloud MapReduce for Big Data", *IEEE Transactions on Cloud Computing*, vol. 8, no. 2, April-June 2020, pp. 375-386.

49. Huawei Huang, Peng Li, Song Guo, Weifa Liang, and Kun Wang, "Near-Optimal Deployment of Service Chains by Exploiting Correlations between Network Functions", *IEEE Transactions on Cloud Computing*, vol. 8, no. 2, April-June 2020, pp. 585-596.

50. Wenchao Xu, SongGuo, Shiheng Ma, Haibo Zhou, Mingli Wu, and Weihua Zhuang, "Augmenting Drive-thru Internet via Reinforcement Learning based Rate Adaptation", *IEEE Internet of Things Journal*, vol. 7, no. 4, April 2020, pp. 3114-3123.

51. Chao Qiu, Haipeng Yao, F. Richard Yu, Chunxiao Jiang, and Song Guo, "A Service-Oriented Permissioned Blockchain for the Internet of Things", *IEEE Transactions on Service Computing*, vol. 13, no. 2, March/April 2020, pp. 203-215.

52. Shaoyong Guo, Xing Hu, Song Guo, Xuesong Qiu, and Feng Qi, "Blockchain Meets Edge Computing: A Distributed and Trusted Authentication System", *IEEE Transactions on Industrial Informatics*, vol. 16, no. 3, March 2020, pp. 1972-1983.

53. Chenhan Xu, Kun Wang, Yanfei Sun, Song Guo, and Albert Y. Zomaya, "Redundancy Avoidance for Big Data in Data Centers: A Conventional Neural Network Approach", *IEEE Transactions on Network Science and Engineering*, vol. 7, no. 1, January-March 2020, pp. 104-114.

54. Chenhan Xu, Kun Wang, Peng Li, Rui Xia, Song Guo, and Minyi Guo, "Renewable Energy-Aware Big Data Analytics in Geo-distributed Data Centers with Reinforcement Learning", *IEEE Transactions on Network Science and Engineering*, vol. 7, no. 1, January-March 2020, pp. 205-215.

55. Kun Wang, Yun Shao, Lei Xie, Jie Wu, and Song Guo, "Adaptive and Fault-tolerant Data Processing in Healthcare IoT Based on Fog Computing", *IEEE Transactions on Network Science and Engineering*, vol. 7, no. 1, January-March 2020, pp. 263-273.

56.   Zhou Su, Qifan Qi, Qichao Xu, and Song Guo, "Incentive Scheme for Cyber Physical Social Systems Based on User Behaviors", *IEEE Transactions on Emerging Topics in Computing*, vol. 8, no. 1, January-March 2020, pp. 92-103.

57.   Hongji Huang, Song Guo, Guan Gui, Zhen Yang, Jianhua Zhang, Hikmet Sari, and Fumiyuki Adachi, "Deep Learning for Physical-Layer 5G Wireless Techniques: Opportunities, Challenges and Solutions", *IEEE Wireless Communications Magazine*, vol. 27, no. 1, February 2020, pp. 214-222.

58.   Lin Gu, Deze Zeng, Wei Li, Song Guo, Albert Y. Zomaya, and Hai Jin, "Intelligent VNF Orchestration and Flow Scheduling via Model-assisted Deep Reinforcement Learning", *IEEE Journal on Selected Areas in Communications*, vol. 38, no. 2, February 2020, pp. 279-291.

59.   Yinqiu Liu, Kun Wang, Kai Qian, Miao Du, and Song Guo, "Tornado: Enabling Blockchain in Heterogeneous Internet of Things through A Space-Structured Approach", *IEEE Internet of Things Journal*, vol. 7, no. 2, February 2020, pp. 1273-1286.

60.   Zhizhao Qu, BaoliuYe, Bin Tang, Song Guo, and Sanglu Lu, Zhuang, Weihua, "Cooperative Caching for Multiple Bitrate Videos in Small Cell Edges", *IEEE Transactions on Mobile Computing*, vol. 19, no. 2, February 2020, pp. 288-299.

61.   Huakun Huang, Lingjun Zhao, Huawei Huang, and Song Guo, "Machine Fault Detection for Intelligent Self-Driving Networks", *IEEE Communications Magazine*, vol. 58, no. 1, January 2020, pp. 40-46.

62.   Yuben Qu, Shaojie Tang, Chao Dong, Peng Li, Song Guo, Haipeng Dai, and Fan Wu, "Posted Pricing for Chance Constrained Robust Crowdsensing", *IEEE Transactions on Mobile Computing*, vol. 19, no. 1, January 2020, pp. 188-199.

63.   Huawei Huang, Song Guo, Jinsong Wu, and Jie Li, "Service Chaining for Hybrid Network Function", *IEEE Transactions on Cloud Computing*, vol. 7, no. 4, October-December 2019, pp. 1082-1094.

64.   Chunxiao Jiang and Song Guo, "Energy Minimization of Resource Allocation in Cloud-based Satellite Communication Networks", *IEEE Communications Letter*, vol. 23, no. 12, December 2019, pp. 2353-2356.

65.   Shengli Pan, Peng Li, Deze Zeng, Song Guo, and Guangmin Hu, "A Q-learning based Framework for Congested Link Identification", *IEEE Internet of Things Journal*, vol. 6, no. 6, December 2019, pp. 9668-9678.

66.   Hui Lei, Chao Qiu, Haipeng Yao, and Song Guo, "When Blockchain-Enabled Internet of Things Meets Cloud Computing", *IEEE Computer*, vol. 52, no. 12, December 2019, pp. 16-17.

67.   Qiufen Xia, Zichuan Xu, Weifa Liang, Shui Yu, Song Guo, and Albert Y. Zomaya, "Efficient Data Placement and Replication for QoS-Aware Approximate Query Evaluation of Big Data Analytics", *IEEE Transactions on Parallel and Distributed Systems*, vol. 30, no. 12, December 2019, pp. 2677-2691.

68.   Zicong Hong, Wuhui Chen, Huawei Huang, Song Guo, and Zibin Zheng, "Multi-hop Cooperative Computation Offloading for Industrial IoT-Edge-Cloud Computing Environments", *IEEE Transactions on Parallel and Distributed Systems*, vol. 30, no. 12, December 2019, pp. 2759-2774.

69.   Qihua Zhou, Kun Wang, Peng Li, Deze Zeng, Song Guo, Baoliu Ye, and Minyi Guo, "Fast Coflow Scheduling via Traffic Compression and Stage Pipelining in Datacenter Networks", *IEEE Transactions on Computers*, **Featured Paper**, vol. 68, no. 12, December 2019, pp. 1755-1771.

70.   Junchao Yang, Jiangtao Luo, Junxia Wang, and Song Guo, "CMU-VP: Cooperative Multicast and Unicast with Viewport Prediction for VR Video Streaming in 5G H-CRAN", *IEEE Access*, vol. 7, no.1, December 2019, pp. 134187-134197.

71. Haipeng Yao, Tianle Mai, Chunxiao Jiang, Linling Kuang, and Song Guo, "AI Routers & Network Mind: A Hybrid Machine Learning Paradigm for Packet Routing", *IEEE Computational Intelligence Magazine*, vol. 14, no. 4, November 2019, pp. 21-30.

72. An Xie, Huawei Huang, Xiaoliang Wang, Song Guo, Zhuzhong Qian, and Sanglu Lu, "Dual: Deploy Stateful Virtual Network Function Chains by Jointly Allocating Data Control Traffic", *Elsevier Computer Networks*, Volume 162, October 2019, Article 106868.

73. Mingli Wu, Kun Wang, Xiaoqin Cai, Song Guo, Minyi Guo, and Chunming Rong, "A Comprehensive Survey of Blockchain: from Theory to IoT Applications and Beyond", *IEEE Internet of Things Journal* , vol. 6, no. 5, October 2019, pp. 8114-8154.

74. Yuxia Sun, Shing-Chi Cheung, Song Guo, and Ming Cheng, "Disclosing and Locating Concurrency Bugs of Interrupt-Driven IoT Programs", *IEEE Internet of Things Journal*, vol. 6, no. 5, October 2019, pp. 8945-8957.

75. Huining Li, Kun Wang, Toshiaki Miyazaki, Chenhan Xu, Song Guo, and Yanfei Sun, "Trust-enhanced Content Delivery in Blockchain based Information-Centric Networking", *IEEE Network Magazine*, vol. 33, no. 5, September-October 2019, pp. 183-189.

76. Huawei Huang, Song Guo, Weifa Liang, Kun Wang, and Albert Y. Zomaya, "Green Data-Collection from Geo-distributed IoT Networks through Low-Earth-Orbit Satellites", *IEEE Transactions on Green Communications and Networking*, vol. 3, no. 3, September 2019, pp. 806-816.

77. Boyu Deng, Chunxiao Jiang, Jian Yan, Ning Ge, Song Guo, and Shanghong Zhao, "Joint Multigroup Precoding and Resource Allocation in Integrated Terrestrial-Satellite Networks", *IEEE Transactions on Vehicular Technology*, vol. 68, no. 8, August 2019, pp. 8075-8090.

78. Jingyu Zhang, Zhi-Jie Wang, Kun Wang, Song Guo, and Minyi Guo, "Improving Power Efficiency for Online Video Streaming Service: A Self-Adaptive Approach", *IEEE Transactions on Sustainable Computing*, vol. 4, no. 3, July-September 2019, pp. 308-313.

79. Xuan Liu, Jiangjin Yin, Yangyang Liu, Shigeng Zhang, Song Guo, and Kun Wang, "Vital Signs Monitoring with RFID: Opportunities and Challenges", *IEEE Network Magazine*, vol. 33, no. 4, July/August 2019, pp. 126-132.

80. Peng Li, , Xing Wu, Wenfeng Shen, Weiqin Tong, and Song Guo, "Collaboration of Heterogeneous Unmanned Vehicles for Smart Cities", *IEEE Network Magazine*, vol. 33, no. 4, July/August 2019, pp. 133-137.

81. Chao Fang, Song Guo, Zhuwei Wang, Huawei Huang, Haipeng Yao, and Yunjie Liu, "Data-Driven Intelligent Future Network: Architecture, Use Cases, and Challenges", *IEEE Communications Magazine*, vol. 57, no. 7, July 2019, pp. 34-40.

82. Yuxia Sun, Song Guo, Shing-Chi Cheung, and Yong Tang, "Analyzing and Disentangling Interleaved Interrupt-driven IoT Programs", *IEEE Internet of Things Journal*, vol. 6, no. 3, June 2019, pp. 5376-5386.

83. Shigeng Zhang, Chengwei Yang, Danming Jiang, Xiaoyan Kui, Song Guo, Albert Zomaya, and Jianxin Wang, "Nothing Blocks Me: Precise and Real-time LOS/NLOS Path Recognition in RFID Systems", *IEEE Internet of Things Journal*, vol. 6, no. 3, June 2019, pp. 5814-5824.

84. Feng Wang, Wenjun Jiang, Guojun Wang, and Song Guo, "Influence Maximization by Leveraging the Crowdsensing Data in Information Diffusion Network", *Journal of Network and Computer Applications*, vol. 1361, June 2019, pp. 11-2

85. Song Guo, Deze Zeng, Lin Gu, and Jiangtao Luo, "When Green Energy Meets Cloud Radio Access Network: Joint Optimization towards Brown Energy Minimization", *ACM/Springer Mobile Networks and Applications*, vol. 57, no. 5, June 2019, pp. 962-970.

86. Xiaoxuan Hu, Peng Li, Kun Wang, Yanfei Sun, Deze Zeng, Xiaoyan Wang, and Song Guo, "Joint Workload Scheduling and Energy Management for Green Data Centers Powered by Fuel Cells", *IEEE Transactions on Green Communications and Networking*, vol. 3, no. 2, June 2019, pp. 397-406.

87. Deze Zeng, Lin Gu, Shengli Pan, Jingjing Cai, and Song Guo, "Resource Management at the Network Edge: A Deep Reinforcement Learning Approach", *IEEE Network Magazine*, vol. 33, no. 3, May/June 2019, pp. 26-33.

88. Xiangming Zhu, Chunxiao Jiang, Linling Kuang, Ning Ge, Song Guo, and Jianhua Lu, "Cooperative Transmission in Integrated Terrestrial-Satellite Networks", *IEEE Network Magazine*, vol. 33, no. 3, May/June 2019, pp. 204-210.

89. Yushu Zhang, Yong Xiang, Leo Zhang, Yue Rong, Song Guo, "Secure Wireless Communications Based on Compressive Sensing: A Survey", *IEEE Communications Surveys and Tutorials*, vol. 21, no. 2, Secondquarter 2019, pp. 1093-1111.

90. Huawei Huang, Song Guo and Kun Wang, "Proactive Failover for NFV in Edge Networks", *IEEE Communications Magazine*, vol. 57, no. 5, May 2019, pp. 131-137.

91. Lin Gu, Deze Zeng, Sheng Tao, Song Guo, Hai Jin, Albert Zomaya, and Weihua Zhuang, "Fairness-aware Dynamic Rate Control and Flow Scheduling for Network Utility Maximization in Network Service Chain", *IEEE Journal on Selected Areas in Communications*, vol. 37, no. 5, May 2019, pp. 1059-1071.

92. Yu Ma, Weifa Liang, Zichuan Xu, and Song Guo, "Profit Maximization for Admitting Requests with Network Function Services in Distributed Clouds", *IEEE Transactions on Parallel and Distributed Systems*, vol. 30, no. 5, May 2019, pp. 1143-1157.

93. Yilong Hui, Zhou Su, and Song Guo, "Utility Based Data Computing Scheme to Provide Sensing Service in Internet of Things", *IEEE Transactions on Emerging Topics in Computing*, vol. 7, no. 2, April-June 2019, pp. 337-348.

94. Miao Du, Kun Wang, Xiulong Liu, Song Guo, Yan Zhang, "A Differential Privacy-based Query Model for Sustainable Fog Data Centers", *IEEE Transactions on Sustainable Computing*, vol. 4, no. 2, April-June 2019, pp. 145-155.

95. Zicong Hong, Huawei Huang, Song Guo, Wuhui Chen, and Zibin Zheng, "QoS-Aware Cooperative Computation Offloading for Robot Swarms in Cloud Robotics", *IEEE Transactions on Vehicular Technology*, vol. 68, no. 4, April 2019, pp. 4027-4041.

96. Junbo Wang, Koichi Sato, Song Guo, Wuhui Chen, and Jie Wu, "Big Data Processing with Minimal Delay and Guaranteed Data Resolution in Disaster Areas", *IEEE Transactions on Vehicular Technology*, vol. 68, no. 4, April 2019, pp. 3833-3842.

97. Chenhan Xu, Kun, Wang, Peng Li, Song Guo, Jiangtao Luo, Baoliu Ye, and Minyi Guo, "Making Big Data Open in Edges: A Resource-Efficient Blockchain-based Approach", *IEEE Transactions on Parallel and Distributed Systems*, vol. 30, no. 4, April 2019, pp. 870-882.

98. Lin Cui, Fung Po Tso, Song Guo, Weijia Jia, Kaimin Wei, and Wei Zhao, "Enabling Heterogeneous Network Function Chaining", *IEEE Transactions on Parallel and Distributed Systems*, vol. 30, no. 4, April 2019, pp. 842-854.

99. Wuhui Chen, Baichuan Liu, Huawei Huang, Song Guo and Zibin Zheng, "When UAV Swarm Meets Edge-Cloud Computing: The QoS Perspective", *IEEE Network Magazine*, vol. 33, no. 2, March/April 2019, pp. 36-43.

100. Zichuan Xu, Weifa Liang, Meitian Huang, Mike Jia, Song Guo, and Alex Galis, "Efficient NFV-Enabled Multicasting in SDNs", *IEEE Transactions on Communications*, vol. 67, no. 3, March 2019, pp. 2052-2070.

101. Chi Zhang, Chunxiao Jiang, Jin Jin, Sheng Wu, Linling Kuang, and Song Guo, "Spectrum Sensing and Recognition in Satellite Systems", *IEEE Transactions on Vehicular Technology*, vol. 68, no. 3, March 2019, pp. 2502-2516.

102. Feixiang Li, Xiaobin Xu, Haipeng Yao, Jingjing Wang, Chunxiao Jiang, and Song Guo, Multi-Controller Resource Management for Software-Defined Wireless Networks", *IEEE Communications Letter*, vol. 23, no. 3, March 2019, pp. 506-509.

103. Kun Wang, Chenhan Xu, Yan Zhang, Song Guo, Albert Y. Zomaya, "Robust Big Data Analytics for Electricity Price Forecasting in the Smart Grid", *IEEE Transactions on Big Data*, vol. 5, no. 1, March 2019, pp. 34-45.

104. Yixuan Wang, Kun Wang, Huawei Huang, Toshiaki Miyazaki, and Song Guo, "Traffic and Computation Co-Offloading with Reinforcement Learning in Fog Computing for Industrial Applications", *IEEE Transactions on Industrial Informatics*, vol. 15, no. 2, February 2019, pp. 976-986.

105. Xuan Liu, Jiangjin Yin, Shigeng Zhang, Bo Ding, Song Guo, and Kun Wang, "Range-based Localization for Sparse 3-D Sensor Networks", *IEEE Internet of Things Journal*, vol. 6, no. 1, February 2019, pp. 753-764.

106. Chao Dong, Yuben Qu, Haipeng Dai, Song Guo, and Qihui Wu, "Multicast in Multi-Channel Cognitive Radio Ad Hoc Networks: Challenges and Research Aspects", *Elsevier Computer Communications Journal*, vol. 132, November 2018, pp. 10-16.

107. Kun Wang, Qihua Zhou, Song Guo, and Jiangtao Luo, "Cluster Frameworks for Efficient Scheduling and Resource Allocation in Data Center Networks: A Survey", *IEEE Communications Surveys and Tutorials*, vol. 20, no. 4, Fourthquarter 2018, pp. 3560-3580.

108. Jun Mi, Kun Wang, Peng Li, Song Guo, and Yanfei Sun, "Software-defined Green 5G System for Big Data", *IEEE Communications Magazine*, vol. 56, no. 11, November 2018, pp. 116-123.

109. Jingyu Zhang, Zhi-Jie Wang, Song Guo, Dingyu Yang, Gan Fang, Chunyi Peng, and Minyi Guo, "Power Consumption Analysis of Video Streaming in 4G LTE Networks", *Wireless Networks*, vol. 24, no. 8, November 2018, pp. 3083-3098.

110. Deze Zeng, Jie Zhang, Lin Gu, Song Guo, and Jiangtao Luo, "Energy-Efficient Coordinated Multipoint Scheduling in Green Cloud Radio Access Network", *IEEE Transactions on Vehicular Technology*, vol. 67, no. 10, October 2018, pp. 9922-9930.

111. Fawaz AL-Hazemi, Yuyang Peng, Chan-Hyun Youn, Josip Lorincz, Chao Li, Song Guo, and Raouf Boutaba, "Dynamic Allocation of Power Delivery Paths in Consolidated Data Centers based on Adaptive UPS Switching", *Elsevier Computer Networks*, vol. 144, October 2018, pp. 254-270.

112. Jinsong Wu, Song Guo, Huawei Huang, William Liu and Yong Xiang, "Information and Communications Technologies for Sustainable Development Goals: State-of-the-Art, Needs and Perspectives", *IEEE Communications Surveys and Tutorials*, vol. 20, no. 3, Thirdquarter 2018, pp. 2389-2406.

113. Jiahui Yu, Kun Wang, Deze Zeng, Chunsheng Zhu, and Song Guo, "Privacy-preserving Data Aggregation Computing in Cyber-Physical Social Systems", *ACM Transactions on Cyber-Physical Systems*, vol. 3, no. 1, September 2018, pp. 8:1-8:23.

114. Kun Wang, Jun Yu, Yan Yu, Yirou Qian, Deze Zeng, Song Guo, Yong Xiang, and Jinsong Wu, "A Survey on Energy Internet: Architecture, Approach and Emerging Technologies", *IEEE Systems Journal*, vol. 12, no. 3, September 2018, pp. 2403-2416.

115. Xiulong Liu, Xin Xie, Xibin Zhao, Kun Wang, Keqiu Li, Alex Liu, Song Guo, and Jie Wu, "Fast Identification of Blocked RFID Tags", *IEEE Transactions on Mobile Computing*, vol. 17, no. 9, September 2018, pp. 2041-2054.

116. Stefano Bregni, Song Guo, Abdullah Almuttiri, Kashif Bashir, and Keattisak Sripimanwat, Global Communications Newsletter, *IEEE Communications Magazine*, vol. 56, no. 7, July 2018, pp. 7-10.

117. Kun Wang, Huining Li, Sabita Maharjan, Yan Zhang, and Song Guo, "Green Energy Scheduling for Demand Side Management in the Smart Grid", *IEEE Transactions on Green Communications and Networking*, vol. 2, no. 2, June 2018, pp. 596-611.

118. Xiaoxuan Hu, Kun Wang, Xiulong Liu, Yanfei Sun, Peng Li, and Song Guo, "Energy Management for EV Charging in Software-Defined Green Vehicle-to-Grid Network", *IEEE Communications Magazine*, vol. 56, no. 5, May 2018, pp. 156-163.

119. Zeqi Zhang, Chunxiao Jiang, Song Guo, Yi Qian, and Yong Ren, "Temporal Centrality-Balanced Traffic Management for Space Satellite Networks", *IEEE Transactions on Vehicular Technology*, vol. 67, no. 5, May 2018, pp. 4427-4439.

120. Wenxin Li, Deke Guo, Alex Liu, Keqiu Li, Heng Qi, Song Guo, Ali Munir, and Xiaoyi Tao, "CoMan: Managing Bandwidth Across Computing Frameworks in Multiplexed Datacenters", *IEEE Transactions on Parallel and Distributed Systems*, vol. 29, no. 5, May 2018, pp. 1013-1029.

121. Jun Huang, Qiang Duan, Song Guo, Yuhong Yan, and Shui Yu, "Converged Network-Cloud Service Composition with End-to-End Performance Guarantee", *IEEE Transactions on Cloud Computing*, vol. 6, no. 2, April-June 2018, pp. 545-557.

122. Hongwei Wang, Song Guo, Jiannong Cao, and Minyi Guo, "MeLoDy: A Long-term Dynamic Quality-aware Incentive Mechanism for Crowdsourcing", *IEEE Transactions on Parallel and Distributed Systems*, vol. 29, no. 4, April 2018, pp. 901-914.

123. Chengyu Hu, Ming Li, Deze Zeng, and Song Guo, "A Survey on Sensor Placement for Contamination Detection in Water Distribution Systems", *Wireless Networks*, vol. 24, no. 2, February 2018, pp. 647-661.

124. Boyu Deng, Chunxiao Jiang, Linling Kuang, Song Guo, Jianhua Lu, and Shanghong Zhao, "Two-Phase Task Scheduling in Data Relay Satellite Systems", *IEEE Transactions on Vehicular Technology*, vol. 67, no. 2, February 2018, pp. 1782-1793.

125. Huawei Huang, Song Guo and Kun Wang, "Envisioned Wireless Big Data Storage for Low-Earth-Orbit Satellite-based Cloud", *IEEE Wireless Communications Magazine*, vol. 25, no. 1, February 2018, pp. 26-31.

126. Meitian Huang, Weifa Liang, Zichuan Xu, Wenzheng Xu, Song Guo, and Yinlong Xu, "Online Unicasting and Multicasting in Software-Defined Networks", *Elsevier Computer Networks*, vol.132, February 2018, pp. 26-39.

127. Jianping An, Kai Yang, Jinsong Wu, Neng Ye, Song Guo, and Zhifang Liao, "Achieving Sustainable Ultra-Dense Heterogeneous Networks for 5G", *IEEE Communications Magazine*, vol. 55, no. 12, December 2017, pp. 84-90.

128. Chunsheng Zhu, Lei Shu, Victor C. M. Leung, Song Guo, Yan Zhang, and Laurence T. Yang, "Secure Multimedia Big Data in Trust-Assisted Sensor-Cloud for Smart City", *IEEE Communications Magazine*, vol. 55, no. 12, December 2017, pp. 24-30.

129. Chi Harold Liu, Jianxin Zhao, Honggang Zhang, Song Guo, Kin K. Leung, and Jon Crowcroft, "Energy-Efficient Event Detection by Participatory Sensing under Budget Constraints", *IEEE Systems Journal*, vol. 11, no. 4, December 2017, pp. 2490-2501.

130. Xiulong Liu, Xin Xie, Kun Wang, Heng Qi, Jiannong Cao, Song Guo, and Keqiu Li, "Pinpointing Anomaly RFID Tags: Situation and Opportunities", *IEEE Network Magazine*, vol. 31, no. 6, November/December 2017, pp. 40-47.

131. Huining Li, Kun Wang, Xiulong Liu, Yanfei Sun, and Song Guo, "A Selective Privacy Preserving Approach for Multimedia Data", *IEEE Multimedia Magazine*, vol. 24, no. 4, October-December 2017, pp. 14-25.

132. Xiulong Liu, Keqiu Li, Song Guo, Alex X. Liu, Peng Li, Kun Wang, and Jie Wu, "Top-k Queries for Categorized RFID Systems", *IEEE Transactions on Networking*, vol. 25, no. 5, October 2017, pp. 2587-2600.

133. Qimeng Zhang and Song Guo, "Online Shuffling with Task Duplication in the Cloud", *ZTE Communications*, vol. 15, no. 4, October 2017, pp. 38-42.

134. Kun Wang, Li Yuan, Deze Zeng, Song Guo, and Yanfei Sun, "Strategic Anti-Eavesdropping Game for Physical Layer Security in Wireless Cooperative Networks", *IEEE Transactions on Vehicular Technology*, vol. 66, no. 10, October 2017, pp. 9448-9457.

135. Kun Wang, Liqiu Gu, Song Guo, Hongbin Chen, Victor C. M. Leung, and Yanfei Sun, "Crowdsourcing-based Content-Centric Network: A Social Perspective", *IEEE Network Magazine*, vol. 31, no. 5, September/October 2017, pp. 28-34.

136. Meitian Huang, Weifa Liang, Zichuan Xu, and Song Guo, "Efficient Algorithms for Throughput Maximization in Software-Defined Networks with Consolidated Middleboxes", *IEEE Transactions on Network and Service Management*, vol. 14, no. 3, September 2017, pp. 631-645.

137. Huawei Huang, Song Guo, Peng Li, and Toshiaki Miyazaki, "Stochastic Analysis on the Deactivation-Controlled Epidemic Routing in DTNs with Multiple Sinks", *Ad Hoc & Sensor Wireless Networks*, vol. 38, no. 1-4, 2017, pp. 143-167.

138. Huawei Huang, Peng Li, and Song Guo, "Traffic Scheduling for Deep Packet Inspection in Software-Defined Networks", *Concurrency and Computation: Practice and Experience*, vol. 29, no. 16, August 2017, pp. 12-18.

139. Kun Wang, Xiaoxuan Hu, Huining Li, Peng Li, Deze Zeng, Song Guo, "A Survey on Energy Internet Communications for Sustainability", *IEEE Transactions on Sustainable Computing*, vol. 2, no. 3, July-September 2017, pp. 231-254.

140. Jianwei Niu, Shihao Wang, Yiming Su, and Song Guo, "Temporal Factor-aware Video Affective Analysis and Recommendation for Cyber-based Social Media", *IEEE Transactions on Emerging Topics in Computing*, vol. 5, no. 3, July-September 2017, pp. 412-424.

141. Peng Li, Toshiaki Miyazaki, Kun Wang, Song Guo, and Weihua Zhuang, "Vehicle-assist Resilient Information and Network System for Disaster Management", *IEEE Transactions on Emerging Topics in Computing*, vol. 5, no. 3, July-September 2017, pp. 438-448.

142. Deze Zeng, Jie Zhang, Song Guo, Lin Gu, and Kun Wang, "Take Renewable Energy into CRAN toward Green Wireless Access Networks", *IEEE Network Magazine*, vol. 31, no. 4, July/August 2017, pp. 62-68.

143. Junbo Wang, Song Guo, Zixue Cheng, Peng Li, and Jie Wu, "Optimization of Deployable Base Stations with Guaranteed QoE in Disaster Scenarios", *IEEE Transactions on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 6536-6552.

144. Zhou Su, Qichao Xu, Yilong Hui, Mi Wen, and Song Guo, "A Game Theoretic Approach to Parked Vehicle Assisted Content Delivery in Vehicular Ad Hoc Networks", *IEEE Transactions on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 6461-6474.

145. Kun Wang, Li Yuan, Toshiaki Miyazaki, Song Guo, and Yanfei Sun, "Anti-Eavesdropping with Selfish Jamming in Wireless Networks: A Bertrand Game Approach", *IEEE Transactions on Vehicular Technology*, vol. 66, no. 7, July 2017, pp. 6268-6279.

146. Qinhui Wang, Baoliu Ye, Bin Tang, Tianyin Xu, Song Guo, Sanglu Lu, and Weihua Zhuang, "Robust Large-Scale Spectrum Auctions against False-name Bids", *IEEE Transactions on Mobile Computing*, vol. 16, no. 6, June 2017, pp. 1730-1743.

147. Yuben Qu, Chao Dong, Song Guo, Shaojie Tang, Hai Wang, and Chang Tian, "Spectrum-Aware Network Coded Multicast in Mobile Cognitive Radio Ad Hoc Networks", *IEEE Transactions on Vehicular Technology*, vol. 66, no. 6, June 2017, pp. 5340-5350.

148. Zhou Su, Yilong Hui, Tom H. Luan, and Song Guo, "Engineering a Game Theoretic Access for Urban Vehicular Networks", *IEEE Transactions on Vehicular Technology*, vol. 66, no. 6, June 2017, pp. 4602-4615.

149. Peng Li, Song Guo, Toshiaki Miyazaki, Xiaofei Liao, Hai Jin, Albert Y. Zomaya, and Kun Wang, "Traffic-aware Geo-distributed Big Data Analytics with Predictable Job Completion Time", *IEEE Transactions on Parallel and Distributed Systems*, vol. 28, no. 6, June 2017, pp. 1785-1796.

150. Huawei Huang and Song Guo, "Adaptive Service Provisioning for Mobile Edge Cloud", *ZTE Communications*, vol. 15, no. 2, April 2017, pp. 2-10.

151. Kun Wang, Liqiu Gu, Xiaoming He, Song Guo, Yanfei Sun, Alexey Vinel, and Jian Shen, "Distributed Energy Management for Vehicle-to-Grid Networks", *IEEE Network Magazine*, vol. 31, no. 2, March/April 2017, pp. 22-28.

152. Lin Gu, Deze Zeng, Song Guo, Ahmed Barnawi, and Yong Xiang, "Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System", *IEEE Transactions on Emerging Topics in Computing*, vol. 5, no. 1, March 2017, pp. 108-119.

153. Jun Huang, Xiang Li, Cong-cong Xing, Wei Wang, Kun Hua, and Song Guo, "DTD: A Novel Double-Track Approach to Clone Detection for RFID-enabled Supply Chains", *IEEE Transactions on Emerging Topics in Computing*, vol. 5, no. 1, March 2017, pp. 134-140.

154. Kun Wang, Yihui Wang, Deze Zeng, and Song Guo, "An SDN-based Architecture for Next-generation Wireless Networks", *IEEE Wireless Communications Magazine*, vol. 24, no. 1, February 2017, pp. 25-31.

155. Xiulong Liu, Keqiu Li, Alex X. Liu, Song Guo, Muhammad Shahzad, Ann L. Wang, and Jie Wu, "Multi-category RFID Estimation", *IEEE/ACM Transactions on Networking*, vol. 25, no. 1, February 2017, pp. 264-277.

156. Miao Xie, Jiankun Hu, Song Guo, and Albert Y. Zomaya, "Distributed Segment-based Anomaly Detection with Kullback-Leibler Divergence in Wireless Sensor Networks", *IEEE Transactions on Information Forensics and Security*, vol. 12, no. 1, January 2017, pp. 101-110.

157. Deze Zeng, Lin Gu, Lu Lian, Song Guo, and Hong Yao, "On Cost-Efficient Sensor Placement for Contaminant Detection in Waster Distribution Systems", *IEEE Transactions on Industrial Informatics*, vol. 12, no. 6, December 2016, pp. 2177-2185.

158. Kun Wang, Yihui Wang, Yanfei Sun, Song Guo, and Jinsong Wu, "Green Industrial Internet of Things Architecture: An Energy-efficient Perspective", *IEEE Communications Magazine*, vol. 54, no. 12, December 2016, pp. 48-54. (**2018 IEEE ComSoc TCGCC Best Magazine Paper Award**)

159. Deze Zeng, Lin Gu, Song Guo, Zixue Cheng, and Shui Yu, "Joint Optimization of Task Scheduling and Image Placement in Fog Computing Supported Software-Defined Embedded System", *IEEE Transactions on Computers*, vol. 65, no. 12, December 2016, pp. 3702-3712.

160. Huawei Huang, Song Guo, Jinsong Wu, and Jie Li, "Green DataPath for TCAM-based Software-Defined Networks", *IEEE Communications Magazine*, vol. 54, no. 11, November 2016, pp. 194-201.

161. Fen Zhou, Zhenzhong Chen, Song Guo, and Jie Li, "Maximizing Lifetime of Data-Gathering Trees with Different Aggregation Modes in WSNs", *IEEE Sensors Journal*, vol. 16, no. 22, November 2016, pp. 8167-8177.

162. Huawei Huang, Song Guo, Weifa Liang, Keqiu Li, Baoliu Ye, and Weihua Zhuang, "Near-Optimal Routing Protection for In-Band Software-Defined Heterogeneous Networks", *IEEE Journal on Selected Areas in Communications*, vol. 34, no. 11, November 2016, pp. 2918-2934.

163. Toshiaki Miyazaki, Peng Li, Song Guo, Junji Kitamichi, Takafumi Hayashi, and Tsuneo Tsukahara, "Demand-Addressable Sensor Network: Toward Large-Scale Active Information Acquisition", *IEEE Sensors Journal*, vol. 16, no. 20, October 2016, pp. 7421-7432.

164. Zichuan Xu, Weifa Liang, Wenzheng Xu, Jia Mike, and Song Guo, "Efficient Algorithms for Capacitated Cloudlet Placements", *IEEE Transactions on Parallel and Distributed Systems*, vol. 27, no. 10, October 2016, pp. 2866-2880.

165. Peng Li, Song Guo, Toshiaki Miyazaki, Miao Xie, Jiankun Hu, and Weihua Zhuang, "Privacy-Preserving Access to Big Data in the Cloud", *IEEE Cloud Computing Magazine*, vol. 3, no. 5, September/October 2016, pp. 34-42.

166. Jinsong Wu, Song Guo, Jie Li, and Deze Zeng, "Big Data Meet Green Challenges: Greening Big Data", *IEEE Systems Journal*, vol. 10, no. 3, September 2016, pp. 873-887.

167. Jinsong Wu, Song Guo, Jie Li, and Deze Zeng, "Big Data Meet Green Challenges: Big Data toward Green Applications", *IEEE Systems Journal*, vol. 10, no. 3, September 2016, pp. 888-900. (**2017 IEEE Systems Journal Best Paper Award**)

168. Guangyu Gao, Chi Harold Liu, Min Chen, Song Guo, and Kin K. Leung, "Cloud-based Video Actor Identification with Batch-Orthogonal Local-Sensitive Hashing and Sparse Representation", *IEEE Transactions on Multimedia*, vol. 18, no. 9, September 2016, pp. 1749-1761.

169. Junbo Wang, Yilang Wu, Neil Yen, Song Guo, and Zixue Cheng, "Big Data Analytics for Emergency Communication Networks: A Survey", *IEEE Communications Surveys and Tutorials*, vol. 18, no. 3, August 2016, pp. 1758-1778.

170. Zhou Su, Yilong Hui, and Song Guo, "D2D Based Content Delivery with Parked Vehicles in Vehicular Social Networks", *IEEE Wireless Communications Magazine*, vol. 23, no. 4, August 2016, pp. 90-95.

171. Qichao Xu, Zhou Su, and Song Guo, "A Game Theoretical Incentive Scheme for Relay Selection Services in Mobile Social Networks", *IEEE Transactions on Vehicular Technology*, vol. 65, no. 8, August 2016, pp. 6692-6702.

172. Peng Xiao, Zhiyang Li, Song Guo, Heng Qi, Wenyu Qu, and Haisheng Yu, "A K self-adaptive SDN controller placement for WAN", *Frontiers of Information Technology & Electronic Engineering*, vol. 17, no. 7, July 2016, pp. 620-633.

173. Kaimin Wei, Song Guo, Xiangli Li, Deze Zeng, and Ke Xu, "Congestion Control in Social-based Sensor Networks: A Social Network Perspective", *Springer Peer-to-Peer Networking and Applications*, vol. 9, no. 4, July 2016, pp. 681-691.

174. Shui Yu, Wanlei Zhou, Song Guo, and Minyi Guo, "A Feasible IP Traceback Framework through Dynamic Deterministic Packet Marking", *IEEE Transactions on Computers*, vol. 65, no. 5, May 2016, pp. 1418-1427.

175. Tianrui Zong, Yong Xiang, Song Guo, and Yue Rong, "Rank-Based Image Watermarking Method with High Embedding Capacity and Robustness", *IEEE Access*, vol. 4, April 2016, pp. 1689-1699.

176. Huawei Huang, Song Guo, Peng Li, Weifa Ling, and Albert Y. Zomaya, "Cost Minimization for Rule Caching in Software Defined Networking", *IEEE Transactions on Parallel and Distributed Systems*, vol. 27, no. 4, April 2016, pp. 1007-1016.

177. Abid Mehmood, Iynkaran Natgunanathan, Yong Xiang, Guang Hua, and Song Guo, "Protection of Big Data Privacy", *IEEE Access*, vol. 4, April 2016, pp. 1821-1834.

178. Chi Chen, Xiaojie Zhu, Peisong Shen, Jiankun Hu, Song Guo, Zahir Tari, and Albert Y. Zomaya, "An Efficient Privacy-Preserving Ranked Keyword Search Method", *IEEE Transactions on Parallel and Distributed Systems*, vol. 27, no. 4, April 2016, pp. 953-961.

179. Bin Tang, Shenghao Yang, Baoliu, Ye, Song Guo, and Sanglu Lu, "Near-optimal One-sided Scheduling for Coded Segmented Network Coding", *IEEE Transactions on Parallel and Distributed Systems*, vol. 65, no. 3, March 2016, pp. 929-939.

180. Huan Ke, Peng Li, Song Guo, and Minyi Guo, "On Traffic-Aware Partition and Aggregation in MapReduce for Big Data Applications", *IEEE Transactions on Parallel and Distributed Systems,* vol. 27, no. 3, March 2016, pp. 818-828.

181. Feilong Tang, Minyi Guo, Song Guo, and Cheng-Zhong Xu, "Mobility Prediction Based Joint Stable Routing and Channel Assignment for Mobile Ad Hoc Cognitive Networks", *IEEE Transactions on Parallel and Distributed Systems*, vol. 27, no. 3, March 2016, pp. 789-802.

182. Peng Li and Song Guo, "A Truthful Double Auction for Device-to-device Communications in Cellular Networks", *IEEE Journal on Selected Areas in Communications*, vol. 34, no. 1, January 2016, pp. 71-81.

183. Justie Su-Tzu Juan, Yung-Chang Chen, and Song Guo, "Fault-Tolerant Visual Secret Sharing Schemes without Pixel Expansion", *Applied Sciences*, vol. 6, no. 1, January 2016.

184. Lin Gu, Deze Zeng, Song Guo, Yong Xiang, and Jiankun Hu, "A General Communication Cost Optimization Framework for Big Data Stream Processing in Geo-distributed Data Centers", *IEEE Transactions on Computers*, vol. 65, no. 1, January 2016, pp. 19-29.

185. Deze Zeng, Song Guo, Huawei Huang, Shui Yu, and Victor C.M. Leung "Minimizing Inter-VM Communication Cost in Data Centers with VM Placement", *International Journal of Autonomous and Adaptive Communications Systems*, vol. 8, no. 4, 2015, pp. 392-406.

186. Yong Xiang, Iynkaran Natgunanathan, Yue Rong, and Song Guo, "Spread Spectrum Based High Embedding Capacity Watermarking Method for Audio Signals", *IEEE/ACM Transactions on Audio, Speech and Language Processing*, vol. 23, no. 12, December 2015, pp. 2228-2237.

187. Huawei Huang, Song Guo, Peng Li, Baoliu Ye, and Ivan Stojmenovic, "Joint Optimization of Rule Placement and Traffic Engineering for QoS Provisioning in Software Defined Network", *IEEE Transactions on Computers*, vol. 64, no. 12, December 2015, pp. 3488-3499.

188. Hong Yao, Deze Zeng, Huawei Huang, Song Guo, Ahmed Barnawi, and Ivan Stojmenovic, "Opportunistic Offloading of Deadline-Constrained Bulk Cellular Traffic in Vehicular DTNs", *IEEE Transactions on Computers*, vol. 64, no. 12, December 2015, pp. 3515-3527.

189. Chengyu Hu, Jing Zhao, Xuesong Yan, Deze Zeng, and Song Guo, "A MapReduce based Parallel Niche Genetic Algorithm for Contaminant Source Identification in Water Distribution Network", *Ad Hoc Networks*, vol. 35, December 2015, pp. 116-126.

190. Deze Zeng, Peng Li, Song Guo, Toshiaki Miyazaki, Jiankun Hu, and Yong Xiang, "Energy Minimization in Multi-Task Software-Defined Sensor Networks", *IEEE Transactions on Computers*, vol. 64, no. 11, November 2015, pp. 3128-3139.

191. Huan Ke, Peng Li, Song Guo, and Ivan Stojmenovic, "Aggregation on the Fly: Reducing Traffic for Big Data in Cloud", *IEEE Network Magazine*, vol. 29, no. 5, September/October 2015, pp. 17-23.

192. Kaimin Wei, Song Guo, Deze Zeng, Ke Xu, and Keqiu Li, "Exploiting Small World Properties for Message Forwarding in Delay Tolerant Networks", *IEEE Transactions on Computers*, vol. 64, no. 10, October 2015, pp. 2809-2818.

193. Peng Li and Song Guo, "Incentive Mechanisms for Device-to-Device Communications", *IEEE Network Magazine*, vol. 29, no. 4, July/August 2015, pp. 75-79.

194. Huawei Huang, Peng Li, Song Guo, and Weihua Zhuang, "Software-Defined Wireless Mesh Networks: Architecture and Traffic Orchestration", *IEEE Network Magazine*, vol. 29, no. 4, July/August 2015, pp. 24-30.

195. Deze Zeng, Song Guo, Ahmed Barnawi, Shui Yu, and Ivan Stojmenovic, "An Improved Stochastic Modeling of Opportunistic Routing in Vehicular CPS", *IEEE Transactions on Computers*, vol. 64, no. 7, July 2015, pp. 1819-1829.

196. Zaiyang Tang, Song Guo, Peng Li, Toshiaki Miyazaki, Hai Jin, and Xiaofei Liao, "Energy-Efficient Transmission Scheduling in Mobile Phones using Machine Learning and Participatory Sensing", *IEEE Transactions on Vehicular Technology*, vol. 64, no. 7, July 2015, pp. 3167-3176.

197. Li Gu, Deze Zeng, Ahmed Barnawi, Song Guo, and Ivan Stojmenovic, "Optimal Task Placement with QoS Constraints in Geo-distributed Data Centers using DVFS", *IEEE Transactions on Computers*, vol. 64, no. 7, July 2015, pp. 2049-2059.

198. Peng Li, Song Guo, and Jiankun Hu, "Energy-Efficient Cooperative Communications for Multimedia Applications in Multi-Channel Wireless Networks", *IEEE Transactions on Computers*, vol. 64, no. 6, June 2015, pp. 2670-2679.

199. Qinhui Wang, Baoliu Ye, Tianyin Xu, Sanglu Lu, and Song Guo, "Approximately Truthful Mechanisms for Radio Spectrum Allocation", *IEEE Transactions on Vehicular Technology*, vol. 64, no. 6, June 2015, pp. 2615-2626.

200. Zaiyang Tang, Zirui Wang, Peng Li, Song Guo, Xiaofei Liao, and Hai Jin, "An Application Layer Protocol for Energy-Efficient Bandwidth Aggregation with Guaranteed Quality-of-Experience", *IEEE Transactions on Parallel and Distributed Systems*, vol. 26, no. 6, June 2015, pp. 1538-1546.

201. Wei-Lun Chang, Deze Zeng, Rung-Ching Chen, and Song Guo, "An Artificial Bee Colony Algorithm for Data Collection Path Planning in Sparse Wireless Sensor Networks", *International Journal of Machine Learning and Cybernetics*, vol. 6, no. 3, June 2015, pp. 375-383.

202. Yong Xiang, Tianrui Zong, Iynkaran Natgunanathan, Song Guo, Wanlei Zhou, and Gleb Beliakov, "Robust Histogram Shape Based Method for Image Watermarking", *IEEE Transactions on Circuits and Systems for Video Technology*, vol. 25, no. 5, May 2015, pp. 717-729.

203. Guojun Wang, Felix Musau, Song Guo, and Muhammad Bashir Abdullahi, "Neighbor Similarity Trust against Sybil Attack in P2P E-Commerce", *IEEE Transactions on Parallel and Distributed Systems*, vol. 26, no. 3, March 2015, pp. 824-833.

204. Zixue Cheng, Peng Li, Junbo Wan,g and Song Guo, "Just-in-Time Code Offloading for Wearable Computing", *IEEE Transactions on Emerging Topics in Computing*, vol. 3, no. 1, March 2015, pp. 74-83.

205. Miao Xie, Jiankun Hu, and Song Guo, "Segment-Based Anomaly Detection with Approximated Sample Covariance Matrix in Wireless Sensor Networks", *IEEE Transactions on Parallel and Distributed Systems*, vol. 26, no. 2, February 2015, pp. 574-583.

206. Shui Yu, Song Guo, and Ivan Stojmenovic, "Fool Me If You Can: Mimicking Attacks and Anti-attacks in Cyberspace", *IEEE Transactions on Computers*, **Spotlight Paper**, vol. 64, no. 1, January 2015, pp. 139-151.

207. Shui Yu, Guofei Gu, Song Guo, and Ivan Stojmenovic "Malware Propagation in Large-Scale Networks", *IEEE Transactions on Knowledge and Data Engineering*, vol. 27, no. 1, January 2015, pp. 170-179.

208. He Li, Peng Li, Song Guo, and Amiya Nayak, "Byzantine-Resilient Secure Software-Defined Networks with Multiple Controllers in Cloud", *IEEE Transactions on Cloud Computing*, vol. 2, no. 4, October-December 2014, pp. 436-447.

209. Changqing Luo, Shengyong Guo, Song Guo, Laurence T. Yang, Geyong Min, and Xia Xie, "Green Communication in Energy Renewable Wireless Mesh Networks: Routing, Rate Control, and Power Allocation", *IEEE Transactions on Parallel and Distributed Systems*, vol. 25, no. 12, December 2014, pp. 3211-3220.

210. Peng Li, Song Guo, Shui Yu, and Athanasios Vasilakos, "Reliable Multicast with Pipelined Network Coding using Opportunistic Feeding and Routing", *IEEE Transactions on Parallel and Distributed Systems*, vol. 25, no. 12, December 2014, pp. 3264-3273.

211. Tao Huang, Baoliu Ye, Song Guo, Toshiaki Miyazaki, and Sanglu Lu, "Delay Minimization by Exploring Full-Duplex Capacity and Relay-based Cooperative Scheduling in WLANs", *Journal of Network and Computer Applications*, vol. 46, November 2014, pp. 407-417.

212. Song Guo, Deze Zeng and Yong Xiang, "Chameleon Hashing for Secure and Privacy-Preserving Vehicular Communications", *IEEE Transactions on Parallel and Distributed Systems*, vol. 25, no. 11, November 2014, pp. 2794-2803.

213. Zhuo Li, Song Guo, Deze Zeng, and Ivan Stojmenovic, "Joint Resource Allocation for Max-min Throughput in Multicell Networks", *IEEE Transactions on Vehicular Technology*, vol. 63, no. 9, November 2014, pp. 4546-4559.

214. Chen Wang, Baoliu Ye, Xiaoliang Wang, Song Guo, and Sanglu Lu, "Delay and Capacity Analysis in MANETs with Correlated Mobility and *f*-cast Relay", *IEEE Transactions on Parallel and Distributed Systems*, vol. 25, no. 11, November 2014, pp. 2829-2839.

215. Peng Li, Song Guo, Toshiaki Miyazaki, and Weihua Zhuang, "Fine-grained Resource Allocation for Cooperative Device-to-Device Communication in Cellular Networks", *IEEE Wireless Communications Magazine*, vol. 21, no. 5, October 2014, pp. 35-40.

216. Hong Yao, Huawei Huang, Deze Zeng, Bo Li, and Song Guo, "An Energy-aware Deadline-constrained Message Delivery in Delay-Tolerant Networks", *Wireless Networks*, vol. 20, no. 7, October 2014, pp. 1981-1993.

217. Qinhui Wang, Baoliu Ye, Sanglu Lu, and Song Guo, "A Truthful QoS-Aware Spectrum Auction with Spatial Reuse for Large-Scale Networks", *IEEE Transactions on Parallel and Distributed Systems*, vol. 25, no. 10, October 2014, pp. 2499-2508.

218. Mianxiong Dong, Kaoru Ota, He Li, Suguo Du, Haojin Zhu, and Song Guo, "RENDEZVOUS: Towards Fast Event Detecting in Wireless Sensor and Actor Networks", *Springer Computing*, vol. 96, no. 10, October 2014, pp. 995-1010.

219. Lin Gu, Deze Zeng, Peng Li, and Song Guo, "Cost Minimization for Big Data Processing in Geo-Distributed Data Centers", *IEEE Transactions on Emerging Topics in Computing*, vol. 2, no. 3, September 2014, pp. 314-323.

220. Shui Yu, Yonghong Tian, Song Guo, and Dapeng Wu, "Can We Beat DDoS Attacks in Clouds?" *IEEE Transactions on Parallel and Distributed Systems*, vol. 25, no. 9, September 2014, pp. 2245-2254.

221. Yong Xiang, Iynkaran Natgunanathan, Song Guo, Wanlei Zhou, and Saeid Nahavandi, "Patchwork-Based Audio Watermarking Method Robust to De-synchronization Attacks", *IEEE/ACM Transactions on Audio, Speech and Language Processing*, vol. 22, no. 9, September 2014, pp. 1413-1423.

222. Peng Li, Song Guo, and Weihua Zhuang, "Optimal Transmission Scheduling of Cooperative Communications with a Full-duplex Relay", *IEEE Transactions on Parallel and Distributed Systems*, vol. 25, no. 9, September 2014, pp. 2353-2363.

223. Long Zheng, Yanchao Lu, Minyi Guo, Song Guo, and Cheng-Zhong Xu, "Architecture-based Design and Optimization of Genetic Algorithms on Multi- and Many-core Systems", *Future Generation Computer Systems*, vol. 38, September 2014, pp. 75-91.

224. Deze Zeng, Song Guo, and Jiankun Hu, "Reliable Bulk-Data Dissemination in Delay Tolerant Networks", *IEEE Transactions on Parallel and Distributed Systems*, vol. 25, no. 8, August 2014, pp. 2180-2189.

225. He Li, Peng Li, Song Guo, Xiaofei Liao, and Hai Jin "Modeap: Moving Desktop Application to Mobile Cloud Service", *ACM/Springer Mobile Networks and Applications*, vol. 19, no. 4, August 2014, pp. 563-571.

226. Song Guo, Minyi Guo, Victor Leung, Shui Yu, and Yong Xiang, "On the Multicast Lifetime of WANETs with Multibeam Antennas: Formulation, Algorithms, and Analysis", *IEEE Transactions on Computers*, vol. 63, no. 8, August 2014, pp. 1988-2001.

227. Bin Tang, Baoliu Ye, Song Guo, Sanglu Lu, and Dapeng Wu, "Order-Optimal Information Dissemination in MANETs via Network Coding", *IEEE Transactions on Parallel and Distributed Systems*, vol. 25, no. 7, July 2014, pp. 1841-1851.

228. Jiankun Hu, Hemanshu Pota, and Song Guo, "Taxonomy of Attacks for Agent-based Smart Grids", *IEEE Transactions on Parallel and Distributed Systems*, vol. 25, no. 7, July 2014, pp. 1886-1895.

229. Song Guo, "On-Time Warning Delivery for Vehicular Ad-Hoc Networks", *IEEE Computer*, vol. 47, no. 6, June 2014, pp. 6.

230. Peng Li, Song Guo, and Zixue Cheng, "Max-Min Lifetime Optimization for Cooperative Communications in Multi-Channel Wireless Networks", *IEEE Transactions on Parallel and Distributed Systems*, vol. 25, no. 6, June 2014, pp. 1533-1542.

231. Kaimin Wei, Song Guo, and Ke Xu, "CACC: A Context-Aware Congestion Control Approach in Smartphone Networks", *IEEE Communications Magazine*, vol. 52, no. 6, June 2014, pp. 42-48.

232. Kaimin Wei, Deze Zeng, Song Guo, and Ke Xu, "On Social Delay-Tolerant Networking: Aggregation, Tie Detection, and Routing", *IEEE Transactions on Parallel and Distributed Systems*, vol. 25, no. 6, June 2014, pp. 1563-1573.

233. Zhuo Li, Wen-Zhong Li, Song Guo, Xin Liu, Sang-Lu Lu, and Dao-Xu Chen, "On Gateway Selection in Disruption Tolerant Networks", *Ad Hoc & Sensor Wireless Networks*, vol. 20, no. 3-4, 2014, pp. 223-243.

234. Peng Li, Song Guo, Weihua Zhuang, and Baoliu Ye, "On Efficient Resource Allocation for Cognitive and Cooperative Communications", *IEEE Journal on Selected Areas in Communications*, vol. 32, no. 2, February 2014, pp. 264-273.

235. Peng Li, Song Guo, Jiankun Hu, and Ruhul Sarker, "Lifetime Optimization for Reliable Broadcast and Multicast in Wireless Ad-hoc Networks", *Wireless Communications and Mobile Computing*, vol. 14, no. 2, February 2014, pp. 221-231.

236. Deze Zeng, Song Guo, Yong Xiang, and Hai Jin, "On the Throughput of Two-way Relay Networks using Network Coding", *IEEE Transactions on Parallel and Distributed Systems*, vol. 25, no. 1, January 2014, pp. 191-199.

237. Peng Li, Song Guo, and Zixue Cheng, "Joint Optimization of Electricity and Communication Cost for Meter Data Collection in Smart Grid", *IEEE Transactions on Emerging Topics in Computing*, vol. 1, no. 2, December 2013, pp. 297-306.

238. Peng Li and Song Guo, "On the Multicast Capacity in Energy-Constrained Lossy Wireless Networks by Exploiting Intra-batch and Inter-batch Network Coding", *IEEE Transactions on Parallel and Distributed Systems*, vol. 24, no. 11, November 2013, pp. 2251-2260.

239. Honglei Jiang, Hai Jin, Song Guo, and Xiaofei Liao, "A Measurement-based Study on User Management in Private BitTorrent Communities", *Wiley Journal of Concurrency and Computation: Practice and Experience*, vol. 25, no. 14, September 2013, pp. 2052-2066.

240. Bin Tang, Baoliu Ye, Sanglu Lu, and Song Guo, "Coding-Aware Proportional-Fair Scheduling in OFDMA Relay Networks", *IEEE Transactions on Parallel and Distributed Systems*, **Spotlight Paper**, vol. 24, no. 9, September 2013, pp. 1727-1740.

241. Peng Li, Song Guo, and Victor Leung, "Maximum-Lifetime Coding Tree for Multicast in Lossy Wireless Networks", *IEEE Wireless Communications Letters*, vol. 2, no. 3, June 2013, pp. 295-298.

242. Quan Chen, Minyi Guo, Qianni Deng, Long Zheng, Song Guo, and Yao Shen, "HAT: History-based Auto-Tuning MapReduce in Heterogeneous Environments", *Journal of Supercomputing*, vol. 64, no. 3, June 2013, pp. 1038-1054.

243. Xuping Tu, Hai Jin, Jiannong Cao, Song Guo, and Long Zheng, "An Efficient Data Scheduling Scheme for P2P Storage-Constrained IPTV System", *IEEE Transactions on Systems, Man and Cybernetics: Systems*, vol. 43, no. 2, March 2013, pp. 379-389.

244. Yong Xiang, Dezhong Peng, Yang Xiang, and Song Guo, "A Novel Z-Domain Precoding Method for Blind Separation of Spatially Correlated Signals", *IEEE Transactions on Neural Networks and Learning Systems*, vol. 24, no. 1, January 2013, pp. 94-105.

245. Iynkaran Natgunanathan, Yong Xiang, Yue Rong, Wanlei Zhou, and Song Guo, "Robust Patchwork-Based Embedding and Decoding Scheme for Digital Audio Watermarking", *IEEE/ACM Transactions on Audio, Speech and Language Processing*, vol. 20, no. 8, October 2012, pp. 2232-2239.

246. Feilong Tang, Song Guo, Minyi Guo, and Qiang Wang, "An Efficient and Scalable Ubiquitous Storage Scheme for Delay-Sensitive IT Applications", *Springer Journal of Intelligent Manufacturing*, vol. 23, no. 4, August 2012, pp. 955-963.

247. Feilong Tang, Song Guo, and Minyi Guo, "A Chain-Cluster Based Routing Algorithm for Wireless Sensor Networks", *Springer Journal of Intelligent Manufacturing*, vol. 23, no. 4, August 2012, pp. 1305-1313.

248. Peng Li, Song Guo, Yong Xiang, and Hai Jin, "Unicast and Broadcast Throughput Maximization in Amplify-and-Forward Relay Networks", *IEEE Transactions on Vehicular Technology*, vol. 61, no. 6, July 2012, pp. 2768-2776.

249. Shui Yu, Wanlei Zhou, Weijia Jia, Song Guo, Yong Xiang, and Feilong Tang, "Discriminating DDoS Attacks from Flash Crowds Using Flow Correlation Coefficient", *IEEE Transactions on Parallel and Distributed Systems*, vol. 23, no. 6, June 2012, pp. 1037-1080.

250. Zhuo Li, Deze Zeng, Song Guo, Weihua Zhuang, and Sanglu Lu, "On the Throughput of Feedback-less Segmented Network Coding in Delay Tolerant Networks", *IEEE Wireless Communications Letters*, vol. 1, no. 2, April 2012, pp. 93-96.

251. Zhuo Li, Wen-Zhong Li, Song Guo, Sang-Lu Lu, and Dao-Xu Chen, "Delay and Capacity Trade-offs in Mobile Wireless Networks with Infrastructure Support", *Journal of Computer Science and Technology*, vol. 27, no. 2, March 2012, pp. 328-340.

252. Feilong Tang, Minyi Guo, Song Guo, and Shui Yu, "Service-Oriented Wireless Sensor Networks and An Energy-Aware Mesh Routing Algorithm", *Ad Hoc & Sensor Wireless Networks*, vol. 15, no. 1, 2012, pp. 21-46.

253. Feilong Tang, Can Tang, Minyi Guo, Shui Yu, and Song Guo, "A Shadow-like Task Migration Model Based on Context Semantics for Mobile and Pervasive Environments", *Computing and Informatics*, vol. 30, no. 6, December 2011, pp. 1131-1146.

254. Deze Zeng, Song Guo, and Zixue Cheng, "Web of Things: A Survey", *Journal of Communications*, vol. 6, no. 6, September 2011, pp. 424-438.

255. Feilong Tang, Ilsun You, Li Li, Cho-Li Wang, Zixue Cheng, and Song Guo, "A Pipeline-based Approach for Long Transaction Processing in Web Service Environments", *International Journal of Web and Grid Services*, vol. 7, no. 2, 2011, pp. 190-207.

256. Long Zheng, Song Guo, and Minyi Guo, "Energy Efficiency of a Multi-Core Processor by Tag Reduction", *Journal of Computer Science and Technology*, vol. 26, no. 3, 2011, pp. 491-503.

257. Deze Zeng, Song Guo, and Victor Leung, "The Exploration of Network Coding in IEEE 802.15.4 Networks", *EURASIP International Journal of Digital Multimedia Broadcasting*, 2011.

258. Song Guo and An-Ni Shen, "A Compromise-resilient Pair-wise Rekeying Protocol in Hierarchical Wireless Sensor Networks", *International Journal of Computer Systems Science and Engineering*, vol. 25, no. 6, November 2010, pp. 397-405.

259. Song Guo and Victor Leung, "A Distributed Algorithm for Min-Max Tree and Max-Min Cut Problems in Communication Networks", *IEEE/ACM Transactions on Networking*, vol. 18, no. 4, August 2010, pp. 1067-2076.

260. Feilong Tang, Ilsun You, Minyi Guo, and Song Guo, "Context-aware Workflow Management for Intelligent Navigation Applications in Pervasive Environments", *Intelligent Automation and Soft Computing*, vol. 16, no. 4, 2010, pp. 605-619.

261. Song Guo and Victor Leung, "Distributed Approximation Algorithms for Longest-lived Multicast in WANETs with Directional Antennas", *IEEE Transactions on Wireless Communications*, vol. 9, no. 7, July 2010, pp. 2227-2237.

262. Song Guo and Victor Leung, "Exact and Performance-Guaranteed Multicast Algorithms for Lifetime Optimization in WANETs", *Wiley Networks*, vol. 55, no. 3, May 2010, pp. 287-297.

263. Song Guo, An-Ni Shen, and Minyi Guo, "A Secure and Scalable Rekeying Mechanism for Hierarchical Wireless Sensor Networks", *IEICE Transactions on Information and Systems*, vol. E93-D, no. 3, March 2010, pp.421-429.

264. Feilong Tang, Song Guo, and Minyi Guo, "Tier-Based Scalable and Secure Routing for Wireless Sensor Networks with Mobile Sinks", *IEICE Transactions on Information and Systems*, vol. E93-D, no. 3, March 2010, pp.458-465.

265. Feilong Tang, Minyi Guo, Song Guo, and Long Zheng, "Balanced Bipartite Graph Based Register Allocation for Network Processors in Mobile and Wireless Networks", *International Journal of Mobile Information Systems*, vol. 6, no. 1, March 2010, pp. 65-83.

266. Minyi Guo, Elizabeth Olule, Guojun Wang, and Song Guo, "Designing Energy Efficient Target Tracking Protocol with Quality Monitoring in Wireless Sensor Networks", *Journal of Supercomputing*, vol. 51, no. 2, February 2010, pp. 131-148.

267. Song Guo, Minyi Guo, and Victor Leung, "A Message Complexity Oriented Design of Distributed Algorithm for Long-lived Multicasting in Wireless Sensor Networks", *International Journal on Sensor Networks*, vol. 6, nos. 3/4, November 2009, pp. 180-190.

268. Mianxiong Dong, Song Guo, and Minyi Guo "Improved Resource Allocation Algorithms for Practical Image Encoding in a Ubiquitous Computing Environment", *Journal of Computers*, vol. 4, no. 9, September 2009, pp. 873-880.

269. An-Ni Shen, Song Guo, and Minyi Guo, "A Scalable Key Pre-distribution Mechanism for Large-scale Wireless Sensor Networks", *Wiley Journal of Concurrency and Computation: Practice and Experience*, vol. 21, no. 10, July 2009, pp. 1373-1387.

270. Song Guo and Oliver Yang, "A Framework for the Multicast Lifetime Maximization Problem in Energy-Constrained Wireless Ad-hoc Networks", *Wireless Networks*, vol. 15, no. 3, April 2009, pp. 313-329.

271. Song Guo and Annie Shen, "A Flexible and Efficient Key Distribution Scheme for Renewable Wireless Sensor Networks", *EURASIP Journal on Wireless Communications and Networking*, 2009.

272. Song Guo and Oliver Yang, "Maximizing Multicast Communication Lifetime in Wireless Mobile Ad Hoc Networks", *IEEE Transactions on Vehicular Technology*, vol. 57, no. 4, July 2008, pp. 2414-2425.

273. Song Guo and Oliver Yang, "Energy-Aware Multicasting in Wireless Ad hoc Networks: A survey and Discussion", *Elsevier Computer Communications Journal*, vol. 30, no. 9, June 2007, pp. 2129-2148.

274. Song Guo and Oliver Yang, "Localized Operations for Distributed Minimum Energy Multicast Algorithm in Mobile Ad Hoc Networks", *IEEE Transactions on Parallel and Distributed Systems*, vol. 18, no. 2, February 2007, pp. 186-198.

275. Song Guo, Oliver Yang, and Victor Leung, "Tree-based Distributed Multicast Algorithms for Directional Communications and Lifetime Optimization in Wireless Ad Hoc Networks", *EURASIP Journal on Wireless Communications and Networking*, 2007.

276. Song Guo, Oliver Yang, and Victor Leung, "Joint Optimization of Energy Consumption and Antenna Orientation for Multicasting in Static Ad Hoc Wireless Networks", *IEEE Transactions on Wireless Communications*, vol.5, no.9, September 2006, pp. 2563-2568.

277. Song Guo and Oliver Yang, "Minimum-Energy Multicast in Wireless Ad Hoc Networks with Adaptive Antennas: MILP Formulations and Heuristic Algorithms", *IEEE Transactions on Mobile Computing*, vol. 5, no. 4, April 2006, pp. 333-346.

278. Song Guo and Oliver Yang, "A Constraint Formulation for Minimum-Energy Multicast Routing in Wireless Multihop Ad-hoc Networks", *Wireless Networks*, vol. 12, no.1, February 2006, pp. 23-32.

279. Song Guo and Oliver Yang, "Improving Source Routing Reliability in Mobile Ad Hoc Networks", *IEEE Transactions on Parallel and Distributed Systems*, vol. 16, no. 4, April 2005, pp. 362-373.

280. Song Guo and Oliver Yang, "QoS-Aware Minimum Energy Multicast Tree Construction in Wireless Ad Hoc Networks", *Elsevier Ad Hoc Networks Journal*, vol. 2, no. 3, April 2004, pp. 217-229.

C. Conference Papers

281. Zicong Hong, Song Guo, Peng Li, and Wuhui Chen, Pyramid: A Layered Sharding Blockchain System, *IEEE Conference on Computer Communications* (*INFOCOM*), May 2021.

282. Lin Gu, Deze Zeng, Jie Hu, Hai Jin, Song Guo, and Albert Zomaya, Exploring Layered Container Structure for Cost Efficient Microservice Deployment, *IEEE Conference on Computer Communications* (*INFOCOM*), May 2021.

283. Xin Xie, Xiulong Liu, Song Guo, Heng Qi, and Keqiu Li, A Lightweight Integrity Authentication Approach for RFID-enabled Supply Chains, *IEEE Conference on Computer Communications* (*INFOCOM*), May 2021.

284. Wei Yang Lim, Jer Shyuan Ng, Zehui Xiong, Dusit Niyato, Song Guo, Cyril Leung, Chunyan Miao, "Dynamic Resource Allocation for Hierarchical Federated Learning", *IEEE International Conference on Mobility, Sensing and Networking* (*MSN*), Tokyo, Japan, December 2020.

285. Zhou Su, Tianxin Lin, Qichao Xu, Nan Chen, Shui Yu and Song Guo, "An Online Pricing Strategy of EV Charging and Data Caching in Highway Service Stations", *IEEE International Conference on Mobility, Sensing and Networking* (*MSN*), Tokyo, Japan, December 2020.

286. Shifu Dong, Deze Zeng, Lin Gu, and Song Guo, "Offloading Federated Learning Task to Edge Computing with Trust Execution Environment", *IEEE International Conference on Mobile Ad-Hoc and Smart Systems* (*MASS*), Delhi NCR, India, December 2020.

287. Shengli Pan, Peng Li, Deze Zeng, Zhiyong Zhang, Song Guo, and Ying-Chang Liang, "Learning-Based Network Boolean Tomography for Identifying Congested Links with Correlations", *IEEE Global Telecommunications Conference* (*Globecom*), Taipei, Taiwan, December 2020.

288. Zitong Wang, Deze Zeng, Lin Gu, and Song Guo, "A Game-based Network Slicing and Resource Scheduling for Compute First Networking", *IEEE Global Telecommunications Conference* (*Globecom*), Taipei, Taiwan, December 2020.

289. Tianle Mai, Haipeng Yao, Zehui Xiong, Song Guo, and Dusit Niyato, "Multi-agent Actor-Critic Reinforcement Learning Based In-network Load Balance", *IEEE Global Telecommunications Conference* (*Globecom*), Taipei, Taiwan, December 2020.

290. Jingcai Guo, Shiheng Ma, Jie Zhang, Qihua Zhou, and Song Guo, "Dual-view Attention Networks for Single Image Super-Resolution", *ACM International Conference on Multimedia* (*MM*), Seattle, USA, October 2020.

291. Jiawen Kang, Zehui Xiong, Chunxiao Jiang, Yi Liu, Song Guo, Yang Zhang, Dusit Niyato, Cyril Leung, and Chunyan Miao, "Scalable and Communication-efficient Decentralized Federated Edge Learning with Multi-blockchain Framework", *International Conference on Blockchain and Trustworthy Systems* (*BlockSys*), Dali, China, August 2020.

292. Keshan Zhang, Huawei Huang, Song Guo, and Xiaocong Zhou, "Blockchain-based Participant Selection for Federated Learning", *International Conference on Blockchain and Trustworthy Systems* (*BlockSys*), Dali, China, August 2020.

293. Wenchao Xu, Haibo Zhou, Nan Cheng, Ning Lu, Lijuan Xu, Meng Qin, and Song Guo, "Autonomous Rate Control for Mobile Internet of Things: A Deep Reinforcement Learning Approach", *IEEE Vehicular Technology Conference* (*VTC*) 2020-Fall, Victoria, Canada, October 2020.

294. Shigeng Zhang, Xuan Liu, Song Guo, Albert Zomaya, and Jianxin Wang, "Why Queue Up? Fast Parallel Search of RFID Tags for Multiple Users", *ACM International Symposium on Theory, Algorithmic Foundations, and Protocol Design for Mobile Networks and Mobile Computing* (*MobiHoc*), Online, October 2020.

295. Jianting Zhang, Zicong Hong, Xiaoyu Qiu, Yufeng Zhan, Song Guo, and Wuhui Chen, "SkyChain: A Deep Reinforcement Learning-Empowered Dynamic Blockchain Sharding System", *International Conference on Parallel Processing* (*ICPP*), Edmonton, Canad, August 2020.

296. Shigeng Zhang, Yinggang Li, Xuan Liu, Song Guo, Weiping Wang, and Jianxin Wang, "Towards Real-time Cooperative Deep Inference over the Edge and End Devices", *ACM International Joint Conference on Pervasive and Ubiquitous Computing* (*UbiComp*), Cancun, Mexico, September 2020.

297. Qihua Zhou, Song Guo, Peng Li, Yanfei Sun, Li Li, Minyi Guo, and Kun Wang, "Petrel: Community-aware Synchronous Parallel for Heterogeneous Parameter Server", *IEEE International Conference on Parallel and Distributed Systems* (*ICDCS*), Singapore, July 2020.

298. Jiawei Wang, Chunxiao Jiang, Linling Kuang, and Song Guo, "Iterative Doppler Frequency Offset Estimation in Low SNR Satellite Communications", *IEEE International Wireless Communications and Mobile Computing Conference* (*IWCMC*), Limassol, Cyprus, June 2020.

299. Peng Li, Song Guo, and Toshiaki Miyazaki, "Privacy-preserving Payment Channel Networks using Trusted Execution Environment", *IEEE International Conference on Communications* (*ICC*), Dublin, Ireland, June 2020.

300. Huawei Huang, Sicong Zhou, Jianru Lin, Keshan Zhang, and Song Guo, "Bridge the Trustworthiness amongst Multiple-Party Domains: A Practical Blockchain-based Approach", *IEEE International Conference on Communications* (*ICC*), Dublin, Ireland, June 2020.

301. Enting Guo, Peng Li, Kun Wang, Huibin Feng, Jingyuan Lu, and Song Guo, "Exploiting Computation Reuse in Cloud-Based Deep Learning via Input Reordering", *IEEE International Conference on Communications* (*ICC*), Dublin, Ireland, June 2020.

302. Kuljeet Kaur, Sahil Garg, Georges Kaddoum, and Song Guo, "ESP-VDCE: Energy, SLA, and Price-driven Virtual Data Center Embedding", *IEEE International Conference on Communications* (*ICC*), Dublin, Ireland, June 2020.

303. Wenchao Xu, Haibo Zhou, Tingting Yang, Huaqing Wu, and Song Guo, "Proactive Link Adaptation for Marine Internet of Things in TV White Space", *IEEE International Conference on Communications* (*ICC*), Dublin, Ireland, June 2020.

304. Song Guo and Deze Zeng, "Pedagogical Data Federation toward Education 4.0", *International Conference on Frontiers of Educational Technologies* (*ICFET*), Tokyo, Japan, June 2020.

305. Yufeng Zhan, Peng Li and Song Guo, "Experience-Driven Computational Resource Allocation of Federated Learning by Deep Reinforcement Learning", *IEEE International Parallel and Distributed Processing Symposium* (*IPDPS*), New Orleans, USA, May 2020.

306. Zhenda Xu, Yong Zhang, Chunyang Fu, Limin Liu, Cong Chen, Wenchao Xu, and Song Guo, "Back Shape Measurement and Three-Dimensional Reconstruction of Spinal Shape Using One Kinect Sensor", *IEEE International Symposium on Biomedical Imaging* (*ISBI*), Iowa City, USA, April 2020.

307. Zhi-Jie Wang, Bin Wang, Chunjing Gan, Huazhong Liu, Dingyu Yang, Shiyou Qian and Song Guo, "A Solution for High Availability Memory Access", *International Conference on Algorithms and Architectures for Parallel Processing* (*ICA3PP*), Melbourne, Australia, December 2019.

308. Jie Zhang, Song Guo, Deze Zeng, and Zhihao Qu, "Multi-path Routing Oriented Flow Statistics Collection in Software Defined Networks", *IEEE International Conference on Parallel and Distributed Systems* (*ICPADS*), Tianjin, China, December 2019.

309. Jingyuan Lu, Peng Li, Kun Wang, Huibin Feng, Enting Guo, Xiaoyan Wang, and Song Guo, "Topology-Aware Job Scheduling for Machine Learning Cluster", *IEEE Global Telecommunications Conference* (*Globecom*), Waikoloa, USA, December 2019.

310. Jun Du, Chunxiao Jiang, Abderrahim Benslimane, Song Guo, and Yong Ren, "Stackelberg Differential Game Based Resource Sharing in Hierarchical Fog-Cloud Computing", *IEEE Global Telecommunications Conference* (*Globecom*), Waikoloa, USA, December 2019.

311. Haoge Jia, Zuyao Ni, Chunxiao Jiang, Linling Kuang, Song Guo, and Jianhua Lu, "Enhanced Irregular Repetition Slotted ALOHA with Degree Distribution Adjustment in Satellite Network", *IEEE Global Telecommunications Conference* (*Globecom*), Waikoloa, USA, December 2019.

312. Wenchao Xu, Song Guo, Haibo Zhou, Shiheng Ma, and Mingli Wu, "A Queueing Analysis of the Opportunistic Vehicle-to-Vehicle Communication", *IEEE Global Telecommunications Conference* (*Globecom*), Waikoloa, USA, December 2019.

313. Wenchao Xu, Chao Ma, Song Guo, and Haibo Zhou, "Efficient Rate Adaptation for 802.11af TVWS Vehicular Access via Deep Learning", *IEEE Global Telecommunications Conference* (*Globecom*), Waikoloa, USA, December 2019.

314. Haozhao Wang, Song Guo, and Ruixuan Li, "OSP: Overlapping Computation and Communication in Parameter Server for Fast Machine Learning", *International Conference on Parallel Processing* (*ICPP*), Kyoto, Japan, August 2019.

315. Jingcai Guo and Song Guo, "AMS-SFE: Towards an Alignment of Manifold Structures via Semantic Feature Expansion for Zero-shot Learning", *IEEE International Conference on Multimedia and Expo* (*ICME*), Shanghai, China, July 2019.

316. Qihua Zhou, Kun Wang, Song Guo, Haodong Lu, Li Li, Minyi Guo, and Yanfei Sun, "Falcon: Towards Computation-Parallel Deep Learning in Heterogeneous Parameter Server", *IEEE International Conference on Parallel and Distributed Systems* (*ICDCS*), Dallas, USA, July 2019.

317. Lin Gu, Deze Zeng, Wei Li, Song Guo, Albert Y. Zomaya, and Hai Jin, "Deep Reinforcement Learning based VNF Management in Geo-distributed Edge Computing", *IEEE International Conference on Parallel and Distributed Systems* (*ICDCS*), Dallas, USA, July 2019.

318. Shiheng Ma, Song Guo, Kun Wang, Weijia Jia, and Minyi Guo, "A Cyclic Game for Joint Cooperation and Competition of Edge Resource Allocation", *IEEE International Conference on Parallel and Distributed Systems* (*ICDCS*), Dallas, USA, July 2019.

319. Shiheng Ma, Song Guo, Kun Wang, and Minyi Guo, "Service Demand Prediction with Incomplete Historical Data", *IEEE International Conference on Parallel and Distributed Systems* (*ICDCS*), Dallas, USA, July 2019.

320. Haozhao Wang, Song Guo, Bin Tang, Ruixuan Li, and Chengjie Li, "Heterogeneity-aware Gradient Coding for Straggler Tolerance", *IEEE International Conference on Parallel and Distributed Systems* (*ICDCS*), Dallas, USA, July 2019.

321. Shigeng Zhang, Chengwei Yang, Xiaoyan Kui, Jianxin Wang, Xuan Liu, and Song Guo, "ReActor: Real-time and Accurate Contactless Gesture Recognition with RFID", *IEEE International Conference on Sensing, Communication and Networking* (*SECON*), Boston, USA, June 2019.

322. Boyu Dengy, Chunxiao Jiang, Linling Kuang, Ning Ge, Song Guo, and Shanghong Zhao, "Resource Allocation of Multibeam Communication Satellite Systems in the Sparse Network", *IEEE International Conference on Communications* (*ICC*), Shanghai, China, May 2019.

323. Haipeng Yao, Huiwen Liu, Peiying Zhang, Sheng Wu, Chunxiao Jiang, and Song Guo, "An Intelligent Approach to Energy Efficient Transportation and Qos Routing", *IEEE International Conference on Communications* (*ICC*), Shanghai, China, May 2019.

324. Jingcai Guo and Song Guo, "Adaptive Adjustment with Semantic Feature Space for Zero-Shot Recognition", *IEEE International Conference on Acoustics, Speech, and Signal Processing* (*ICASSP*), Brighton, UK, May 2019.

325. Jingcai Guo and Song Guo, "EE-AE: An Exclusivity Enhanced Unsupervised Feature Learning Approach", *IEEE International Conference on Acoustics, Speech, and Signal Processing* (*ICASSP*), Brighton, UK, May 2019.

326. Yu Ma, Weifa Liang, and Song Guo, "Mobility-Aware Delay-Sensitive Service Provisioning for Mobile Edge Computing", *IEEE INFOCOM Workshop on Reliable and Secure IoT for Health*, Paris, France, April 2019.

327. Yu Ma, Weifa Liang, Meitian Huang, Yang Liu, and Song Guo, "Virtual Network Function Service Provisioning for Offloading Tasks in MEC by Trading off Computing and Communication Resource Usages", *IEEE INFOCOM Workshop on Integrating Edge Computing, Caching, and Offloading in Next Generation Networks*, Paris, France, April 2019.

328. Davide Aguiari, Andrea Ferlini, Jiannong Cao, Song Guo and Giovanni Pau, "C-Continuum: Edge-to-Cloud Computing for Distributed AI", *IEEE INFOCOM Poster*, Paris, France, April 2019.

329. Ting Ye, Zhi-Jie Wang, Zhe Quan, Song Guo, Kenli Li, and Keqin Li, "ISAECC: An Improved Scheduling Approach for Energy Consumption Constrained Parallel Applications on Heterogeneous Distributed Systems", *IEEE International Conference on Parallel and Distributed Systems* (*ICPADS*), Singapore**,** December 2018.

330. Yu Ma, Weifa Liang, Meitian Huang, and Song Guo, "Profit Maximization of NFV-Enabled Request Admissions in SDNs", *IEEE Global Telecommunications Conference* (*Globecom*), Abu Dhabi, UAE, December 2018.

331. Chi Zhang, Chunxiao Jiang, Jin Jin, Sheng Wu, Linling Kuang, and Song Guo, "Spatial Angular Spectrum Sensing for Non-geostationary Satellite Systems", *IEEE Global Telecommunications Conference* (*Globecom*), Abu Dhabi, UAE, December 2018.

332. Letian Kang, Zhi-Jie Wang, Zhe Quan, Weigang Wu, Song Guo, Kenli Li, and Keqin Li, "An Efficient Method for Optimizing PETSc on The Sunway TaihuLight System", *IEEE International Conference on Ubiquitous Intelligence and Computing* (*UIC*), Guangzhou, China, October 2018.

333. Baichuan Liu, Huawei Huang, Song Guo, Wuhui Chen, and Zibin Zheng, "Joint Computation Offloading and Routing Optimization for UAV-Edge-Cloud Computing Environments", *IEEE International Conference on Cloud and Big Data Computing* (*CBDCom*), Guangzhou, China, October 2018.

334. Yibo Jin, Zhuzhong Qian, Song Guo, Sheng Zhang, Xiaoliang Wang, and Sanglu Lu, "ran-GJS: Orchestrating Data Analytics for Heterogeneous Geo-distributed Edges", *International Conference on Parallel Processing* (*ICPP*), Eugene, USA, August 2018.

335. Deze Zeng, Jie Zhang, Lin Gu and Song Guo, "Stochastic Scheduling towards Cost Efficient Network Function Virtualization in Edge Cloud", *IEEE International Conference on Sensing, Communication and Networking* (*SECON*), Hong Kong, June 2018.

336. Qihua Zhou, Peng Li, Kun Wang, Deze Zeng, Song Guo and Minyi Guo, "Swallow: Joint Online Scheduling and Coflow Compression in Datacenter Networks", *IEEE International Parallel and Distributed Processing Symposium* (*IPDPS*), Vancouver, Canada, May 2018.

337. Meitian Huang, Weifa Liang, Yu Ma, and Song Guo, "Throughput Maximization of Delay-Sensitive Request Admissions via Virtualized Network Function Placements and Migrations", *IEEE International Conference on Communications* (*ICC*), Kansas City, USA, May 2018.

338. Xiaoxuan Hu, Peng Li, Kun Wang, Yan-fei Sun, Deze Zeng, and Song Guo, "Energy Management of Data Centers Powered by Fuel Cells and Heterogeneous Energy Storage", *IEEE International Conference on Communications* (*ICC*), Kansas City, USA, May 2018.

339. Huawei Huang, Song Guo, Weifa Liang, and Kun Wang, "Online Green Data Gathering from Geo-distributed IoT Networks via LEO Satellites", *IEEE International Conference on Communications* (*ICC*), Kansas City, USA, May 2018.

340. Chenhan Xu, Kun Wang, Guoliang Xu, Peng Li, Song Guo, and Jiangtao Luo, "Making Big Data Open in Collaborative Edges: A Blockchain-based Framework with Reduced Resource Requirements", *IEEE International Conference on Communications* (*ICC*), Kansas City, USA, May 2018.

341. Baojun Zhou, Jie Li, Jinsong Wu, Song Guo, Yu Gu, and Zhetao Li, "Machine-Learning-Based Online Distributed Denial-of-Service Attack Detection Using Spark Streaming", *IEEE International Conference on Communications* (*ICC*), Kansas City, USA, May 2018.

342. Hua-Yuan Shih, Song Guo, Rung-Ching Chen, and Chen-Yeng Peng, "Enhanced Passcode Recognition Based on Press Force and Time Interval", *Asian Conference on Intelligent Information and Database Systems* (*ACIIDS*), Dong Hoi City, Vietnam, March 2018. (**Best Student Paper Award**)

343. Hongming Zhang, Chunxiao Jiang, Linling Kuang, Yi Qian, Song Guo, "Cooperative QoS Beamforming for Multicast Transmission in Terrestrial-Satellite Networks", *IEEE Global Telecommunications Conference* (*Globecom*), Singapore, December 2017.

344. Baojun Zhou, Jie Li, Song Guo, Jinsong Wu, Yongqiang Hu and Lihua Zhu, "Online Internet Traffic Measurement and Monitoring Using Spark Streaming", *IEEE Global Telecommuni-cations Conference* (*Globecom*), Singapore, December 2017.

345. Lei Wang, Chunxiao Jiang, Linling Kuang, Sheng Wu, and Song Guo, "TDRSS Scheduling Algorithm for Non-uniform Time-Space Distributed Missions", *IEEE Global Telecommuni-cations Conference* (*Globecom*), Singapore, December 2017.

346. Yuxia Sun, Yunlong Xie, Zhi Qiu, Yuchang Pan, Jian Weng, and Song Guo, "Detecting Android Malware Based on Extreme Learning Machine", *IEEE Cyber Science and Technology Congress* (*CyberSciTech*), Orlando, USA, November 2017.

347. Song Guo, Deze Zeng, and Lin Gu, "Green C-RAN: A Joint Approach to the Design and Energy Optimization", *IEEE Vehicular Technology Conference* (*VTC*) 2017-Fall, September 2017, Toronto, Canada.

348. Min Lin, Zhi Lin, Kun Wang, Wei Xu, Song Guo, and Jian Ouyang, "Robust Secure Beamforming for Cognitive Satellite Terrestrial Networks at Millimeter-Wave Frequency", *IEEE Vehicular Technology Conference* (*VTC*) 2017-Fall, September 2017, Toronto, Canada.

349. Hongwei Wang, Song Guo, Jiannong Cao, and Minyi Guo, "MELODY: A Long-term Dynamic Quality-aware Incentive Mechanism for Crowdsourcing", *IEEE International Conference on Parallel and Distributed Systems* (*ICDCS*), Atlanta, USA, June 2017.

350. Zichuan Xu, Weifa Liang, Meitian Huang, Mike Jia, Song Guo, and Alex Galis, "Approximation and Online Algorithms for NFV-Enabled Multicasting in SDNs", *IEEE International Conference on Parallel and Distributed Systems* (*ICDCS*), Atlanta, USA, June 2017.

351. Zaiyang Tang, Peng Li, Song Guo, Xiaofei Liao, and Hai Jin, "Selective Traffic Offloading On the Fly: A Machine Learning Approach", *IEEE International Conference on Parallel and Distributed Systems* (*ICDCS*), Atlanta, USA, June 2017.

352. Peng Li, Toshiaki Miyazaki, and Song Guo, "Traffic-aware Task Placement with Guaranteed Job Completion Time for Geo-distributed Big Data", *IEEE International Conference on Communications* (*ICC*), Paris, France, May 2017.

353. Li Yuan, Kun Wang, Toshiaki Miyazaki, Song Guo, and Meng Wu, "Optimal Transmission Strategy for Sensors to Defend against Eavesdropping and Jamming Attacks", *IEEE International Conference on Communications* (*ICC*), Paris, France, May 2017.

354. Boyu Deng, Chunxiao Jiang, Linling Kuang, Song Guo, Ning Ge, and Jianhua Lu, "Preemptive Dynamic Scheduling Algorithm for Data Relay Satellite Systems", *IEEE International Conference on Communications* (*ICC*), Paris, France, May 2017.

355. Huawei Huang and Song Guo, "Service Provisioning Update Scheme for Mobile Application Users in a Cloudlet Network", *IEEE International Conference on Communications* (*ICC*), Paris, France, May 2017.

356. Liqiu Gu, Kun Wang, Xiulong Liu, Song Guo, and Bo Liu, "A Reliable Task Assignment Strategy for Spatial Crowdsourcing in Big Data Environment", *IEEE International Conference on Communications* (*ICC*), Paris, France, May 2017.

357. Zeqi Zhang, Chunxiao Jiang, Song Guo, Zuyao Ni, and Yong Ren, "Optimal Satellite Scheduling with Critical Node Analysis", *IEEE Wireless Communications and Networking Conference* (*WCNC*), San Francisco, USA, March 2017.

358. Toshiaki Miyazaki, Kazuya Anazawa, Yusuke Igarashi, Peng Li, and Song Guo, "Resilient Information Management System for Disaster Situations", *International Conference on Information Networking* (*ICOIN*), Da Nang, Vietnam, January 2017.

359. Peng Li, Toshiaki Miyazaki, Song Guo, and Weihua Zhuang, "Online Scheduling of Mobile Stations for Disaster Management", *IEEE Global Telecommunications Conference* (*Globecom*), Washington DC, USA, December 2016.

360. Kun Wang, Chenhan Xu, and Song Guo, "Big Data Analytics for Price Forecasting in Smart Grids", *IEEE Global Telecommunications Conference* (*Globecom*), Washington DC, USA, December 2016. (**Best Paper Award**)

361. Xiaofei Luo, Huawei Huang, Peng Li and Song Guo, "Cost-Efficient Service Provisioning for Mobile Applications in Cloudlet Networks", *IEEE Conference on Frontier of Computer Science and Technology* (*FCST*), Nagasaki, Japan, November 2016.

362. Meitian Huang, Weifa Liang, Zichuan Xu, Mike Jia, and Song Guo, "Throughput Maximization in Software-Defined Networks with Consolidated Middleboxes", *IEEE Conference on Local Computer Networks* (*LCN*), Dubai, UAE, November 2016.

363. Kai Yang, Jinsong Wu, Xiaozheng Gao, Xiangyuan Bu, and Song Guo, "Energy-Efficient Power Control for Device-to-Device Communications with Max-Min Fairness", *IEEE Vehicular Technology Conference* (*VTC*) 2016-Fall, September 2016, Montréal, Canada.

364. Huawei Huang, Peng Li, and Song Guo, "Traffic Scheduling for Deep Packet Inspection in Software Defined Networks", *IEEE International Conference on Trust, Security and Privacy in Computing and Communications* (*TrustCom*), Tianjin, China, August 2016. (**Best Paper Award**)

365. Qimeng Zang, Peng Li, and Song Guo, "Software-Defined Data Shuffling for Big Data Jobs with Task Duplication", Workshop on Data Science and Engineering, in conjunction with *International Conference for Parallel Processing* (*ICPP*), Philadelphia, USA, August 2016.

366. Kazuya Anazawa, Peng Li, Song Guo and Toshiaki Miyazaki, "Information Management System Used in Network Isolated Environment", *Tohoku-Section Joint Convention of Institutes of Electrical and Information Engineers*, August 2016, Sendai, Japan. (**Best Paper Award**)

367. Deze Zeng, Guang Yang, Lin Guo, Song Guo, and Hong Yao, "Joint Optimization on Switch Activation and Flow Routing towards Energy Efficient Software Defined Data Center Networks", *IEEE International Conference on Communications* (*ICC*), Kuala Lumpur, Malaysia, May 2016.

368. Huawei Huang, Song Guo, Jinsong Wu, and Jie Li, "Joint MiddleBox Selection and Routing for Software-Defined Networking", *IEEE International Conference on Communications* (*ICC*), Kuala Lumpur, Malaysia, May 2016.

369. Meitian Huang, Weifa Liang, Zichuan Xu, Song Guo, and Yinlong Xu, "Dynamic Routing for Network Throughput Maximization in Software-Defined Networks", IEEE International Conference on Computer Communications (*INFOCOM*), San Francisco, USA, April 2016.

370. Fen Zhou, Zhenzhong Chen, Song Guo, and Jie Li, "Maximizing Lifetime of Data-Gathering Trees with Different Aggregation Modes in WSNs", *IEEE Global Telecommunications Conference* (*Globecom*), San Diego, USA, December 2015.

371. Kazuya Anazawa, Peng Li, Toshiaki Miyazaki, and Song Guo, "Trajectory and Data Planning for Mobile Relay to Enable Efficient Internet Access after Disasters", *IEEE Global Telecommunications Conference* (*Globecom*), San Diego, USA, December 2015.

372. Su-Tzu Juan, Y.C. Chen, and Song Guo, "Towards Shift Tolerant Visual Secret Sharing Schemes without Pixel Expansion", *International Conference on Computing and Precision Engineering* (*ICCPE*), Taiwan, November 2015.

373. Zichuan Xu, Weifa Liang, Wenzheng Xu, Mike Jia, and Song Guo, "Capacitated Cloudlet Placements in Wireless Metropolitan Area Networks", *IEEE Conference on Local Computer Networks* (*LCN*), Clearwater Beach, USA, October 2015.

374. Zhihao Qu, Baoliu Ye, Bin Tang, Sanglu Lu, and Song Guo, "Energy-aware Cost-effective Cooperative Mobile Streaming on Smartphones over Hybrid Wireless Networks", *International Conference on Parallel Processing* (*ICPP*), Beijing, China, September 2015.

375. Toshiaki Miyazaki, Peng Li, Song Guo, Takafumi Hayashi, Junji Kitamichi, and Tsuneo Tsukahara, "Implementation of Demand-Addressable Sensor Network Realizing Demand-Driven Wide-Area Sensing", *IEICE Technical Committee on Communication Systems*, Invited Talk, IEICE Technical Report, vol. 115, no. 211, CS2015-40, pp. 11-16, Morioka, Japan, September 2015.

376. Xiao Lei, Zaiyang Tang, Peng Li, Hai Jin, Song Guo, Xiaofei Liao, and Feng Lu, "Energy Minimization for Cellular Network Interfaces with Dynamic Link Quality", *IEEE International Conference on Computer Communications and Networks* (*ICCCN*), Las Vega, USA, August 2015.

377. Qinhui Wang, Baoliu Ye, Bin Tang, Song Guo, and Sanglu Lu, "eBay in the Clouds: False-name-proof Auctions for Cloud Resource Allocation", *IEEE International Conference on Parallel and Distributed Systems* (*ICDCS*), Columbus, USA, June 2015.

378. Qinhui Wang, Baoliu Ye, Bin Tang, Tianyin Xu, Song Guo, Sanglu Lu, and Weihua Zhuang, "ALETHEIA: Robust Large-Scale Spectrum Auctions against False-name Bids", *ACM Symposium on Mobile Ad Hoc Networking and Computing* (*MobiHoc*), Hangzhou, China, June 2015.

379. He Li, Song Guo, Chentao Wu, and Jie Li, "FDRC: Flow-Driven Rule Caching Optimization in Software Defined Networking", *IEEE International Conference on Communications* (*ICC*), London, UK, June 2015.

380. Huawei Huang and Song Guo, "'Multi-Flow Oriented Packets Scheduling in OpenFlow Enabled Networks", *IEEE International Conference on Communications* (*ICC*), London, UK, June 2015.

381. Peng Li, Toshiaki Miyazaki, and Song Guo, "'Relay Placement for Latency Minimization in Delay Tolerant Networks", *IEEE International Conference on Communications* (*ICC*), London, UK, June 2015.

382. Toshiaki Miyazaki, Peng Li, Song Guo, Junji Kitamichi, Takafumi Hayashi, and Tsuneo Tsukahara, "On-Demand Customizable Wireless Sensor Network", *International Conference on Ambient Systems, Networks and Technologies* (*ANT*), London, UK, June 2015.

383. Su-Tzu Juan, Lu-Chung Chen, and Song Guo, "A New Visual Multi-Secrets Sharing Scheme by Adding Fragments", *International Congress on Engineering and Information* (*ICEAI*), Kyoto, Japan, May 2015.

384. Lin Gu, Deze Zeng, Song Guo, and Baoliu Ye, "Joint Optimization of VM Placement and Request Distribution for Electricity Cost Cut in Geo-distributed Data Centers", *IEEE International Conference on Computing, Networking and Communications* (*ICNC*), Anaheim, USA, February 2015.

385. Tao Huang, Baoliu Ye, Sanglu Lu, Song Guo, and Toshiai Miyazaki, "Delay Minimization by Optimizing Antenna Allocation in SIMO System", *IEEE Global Telecommunications Conference* (*Globecom*), Austin, USA, December 2014.

386. Huawei Huang, Song Guo, Peng Li, and Toshiai Miyazaki, "Deactivation-Controlled Epidemic Routing in Disruption Tolerant Networks with Multiple Sinks", *IEEE Global Telecommunications Conference* (*Globecom*), Austin, USA, December 2014.

387. He Li, Peng Li, and Song Guo, "MoRule: Optimized Rule Placement for Mobile Users in SDN-enabled Access Networks", *IEEE Global Telecommunications Conference* (*Globecom*), Austin, USA, December 2014.

388. Huan Ke and Song Guo, "Towards Latency-Aware Data Acquisition in Wireless Sensor Network", *IEEE International Symposium on Embedded Multicore/Many-core Systems-on-chip* (*MCSoC*), Aizu-Wakamatsu, Japan, September 2014.

389. Bin Tang, Baoliu Ye, Sanglu Lu, Song Guo, and Ivan Stojmenovic, "Latency-optimized Broadcast in Mobile Ad Hoc Networks without Node Coordination", *ACM Symposium on Mobile Ad Hoc Networking and Computing* (*MobiHoc*), Philadelphia, USA, August 2014.

390. He Li, Peng Li, Song Guo, and Shui Yu, "Byzantine-Resilient Secure Software-Defined Networks with Multiple Controllers", *IEEE International Conference on Communications* (*ICC*), Sydney, Australia, June 2014.

391. Kaimin Wei, Song Guo, Deze Zeng, and Ke Xu, "A Multi-Attribute Decision Making Approach to Congestion Control in Delay Tolerant Networks", *IEEE International Conference on Communications* (*ICC*), Sydney, Australia, June 2014.

392. Deze Zeng, Peng Li, Song Guo, and Toshiaki Miyazaki, "Minimum-Energy Reprogramming with Guaranteed Quality-of-Sensing in Software-Defined Sensor Networks", *IEEE International Conference on Communications* (*ICC*), Sydney, Australia, June 2014.

393. Huawei Huang, Deze Zeng, Song Guo, and Hong Yao, "Joint Optimization of Task Mapping and Routing for Service Provisioning in Distributed Datacenters", *IEEE International Conference on Communications* (*ICC*), Sydney, Australia, June 2014.

394. He Li, Peng Li, and Song Guo, "Efficient Privacy-preserving Multicast in Cloud Data Centers", *IEEE International Conference on Communications* (*ICC*), Sydney, Australia, June 2014.

395. Huawei Huang, Peng Li, and Song Guo, "The Joint Optimization of Rules Allocation and Traffic Engineering in Software Defined Network", *IEEE/ACM International Symposium on Quality of Service* (*IWQoS*), Hong Kong, China, May 2014.

396. Peng Li and Song Guo, "Load Balancing for Privacy-Preserving Access to Big Data in Cloud", *IEEE INFOCOM Workshop on Security and Privacy in Big Data*, Toronto, Canada, April 2014.

397. Huan Ke, Peng Li, and Song Guo, "Crowdsourcing on Mobile Cloud: Cost Minimization of Joint Data Acquisition and Processing", *IEEE INFOCOM Workshop on Mobile Cloud Computing*, Toronto, Canada, April 2014.

398. Qinhui Wang, Baoliu Ye, Bolei Zhang, Sanglu Lu, and Song Guo, "An Approximately Strategy-Proof Mechanism for Radio Spectrum Allocation", *IEEE Wireless Communications and Networking Conference* (*WCNC*), Istanbul, Turkey, April 2014.

399. Lin Gu, Deze Zeng, Song Guo, and Shui Yu, "Type-aware Task Placement in Geo-distributed Data Centers with Low OPEX using Data Center Resizing", *IEEE International Conference on Computing, Networking and Communications* (*ICNC*), Honolulu, USA, February 2014.

400. Toshiaki Miyazaki, Shoichi Yamaguchi, Koji Kobayashi, Jyunji Kitamichi, Song Guo, Tsuneo Tsukahara, and Takafumi Hayashi, "A Software Defined Wireless Sensor Network", *IEEE International Conference on Computing, Networking and Communications* (*ICNC*) Workshop, Honolulu, USA, February 2014.

401. Toshiaki Miyazaki, Hiroki Iwata, Koji Kobayashi, Shoichi Yamaguchi, Deze Zeng, Song Guo, Junji Kitamichi, Takafumi Hayashi, and Tsuneo Tsukahara, "DASN: Demand-addressable Sensor Network for Active Information Acquisition", *ACM International Conference on Ubiquitous Information Management and Communication* (*IMCOM*), Siem Reap, Cambodia, January 2014. (**Best Paper Award**)

402. Deze Zeng, Toshiaki Miyazaki, Song Guo, Tsuneo Tsukahara, Junji Kitamichi, and Takafumi Hayashi, "Evolution of Software-Defined Sensor Networks", International Workshop on Software Defined Sensor Networks, in conjunction with *IEEE International Conference on Wireless Ad-hoc and Sensor Networks* (*MSN*), Dalian, China, December 2013.

403. Peng Li, Song Guo, and Weihua Zhuang, "Interference Cancellation of Full-duplex Cooperative Communications", *IEEE Global Telecommunications Conference* (*Globecom*), Atlanta, USA, December 2013.

404. Shui Yu, Wanlei Zhou, Song Guo, and Minyi Guo, "A Dynamical Deterministic Packet Marking Scheme for DDoS Traceback", *IEEE Global Telecommunications Conference* (*Globecom*), Atlanta, USA, December 2013.

405. Lin Gu, Deze Zeng, and Song Guo, "Vehicular Cloud Computing: A Survey", *IEEE Globecom Workshop on Cloud Computing Systems, Networks, and Applications*, Atlanta, USA, December 2013.

406. Lin Gu, Deze Zeng, and Song Guo, "QoS-aware Task Placement in Geo-distributed Data Centers with Low OPEX using Dynamic Frequency Scaling", *IEEE International Conference on High Performance Computing and Communications* (*HPCC*), Zhangjiajie, China, November 2013.

407. Deze Zeng, Song Guo, Huawei Huang, Shui Yu, and Victor C.M. Leung "Optimal VM Placement in Data Centers with Architectural and Resource Constraints", *IEEE International Conference on High Performance Computing and Communications* (*HPCC*), Zhangjiajie, China, November 2013.

408. Shoichi Yamaguchi, Toshiaki Miyazaki, Junji Kitamichi, Song Guo, Tsuneo Tsukahara, and Takafumi Hayashi, "Programmable Wireless Sensor Node Featuring Low-power FPGA and Microcontroller", *IEEE International Conference on Ubi-Media Computing* (*UMEDIA*), Aizu-Wakamatsu, Japan, November 2013.

409. Mianxiong Dong, Kaoru Ota, Suguo Du, Haojin Zhu, and Song Guo, "ANTS: Pushing the Rapid Event Notification in Wireless Sensor and Actor Networks", *IEEE International Conference on Ubi-Media Computing* (*UMEDIA*), Aizu-Wakamatsu, Japan, November 2013.

410. Kaimin Wei, Deze Zeng, Song Guo, and Ke Xu, "Social-aware Relay Node Selection in Delay Tolerant Networks", *IEEE International Conference on Computer Communications and Networks* (*ICCCN*), Nassau, Bahamas, August 2013.

411. Xinwang Liu, Qian Zhu, and Song Guo, "Three new uncertainty bound methods of Karnik-Mendel Algorithms", *IEEE International Conference on Fuzzy Systems* (*FUZZ*), Hyderabad, India, July 2013.

412. Huawei Huang, Deze Zeng, Song Guo, Hong Yao, and Toshiaki Miyazaki, "Stochastic Analysis on Epidemic Dissemination of Lifetime-Controlled Messages in DTNs", *IEEE International Wireless Communications and Mobile Computing Conference* (*IWCMC*), Cagliari, Italy, July 2013.

413. Peng Li, Song Guo, Toshiaki Miyazaki, and Victor Leung, "Joint Optimization of Transmission Scheduling and Relay Assignment for Cooperative Communications", *IEEE International Conference on Communications* (*ICC*), Budapest, Hungary, June 2013.

414. Shui Yu, Robin Doss, Wanlei Zhou, and Song Guo, "A General Cloud Firewall *Framework with Dynamic Resource Allocation*", *IEEE International Conference on Communications* (*ICC*), Budapest, Hungary, June 2013.

415. Deze Zeng, Song Guo, Shui Yu, and Ivan Stojmenovic, "Stochastic Modeling and Analysis of Opportunistic Computing in Intermittent Mobile Cloud", *IEEE Conference on Industrial Electronics and Applications* (*ICIEA*), Melbourne, Australia, June 2013.

416. Peng Li, Song Guo, Zixue Cheng, and Athanasios Vasilakos, "Joint Relay Assignment and Channel Allocation for Energy-Efficient Cooperative Communications", *IEEE Wireless Communications and Networking Conference* (*WCNC*), Shanghai, China, April 2013.

417. Lin Gu, Deze Zeng, Song Guo, and Baoliu Ye, "Leverage Parking Cars in a Two-tier Data Center", *IEEE Wireless Communications and Networking Conference* (*WCNC*), Shanghai, China, April 2013.

418. Peng Li and Song Guo, "Delay minimization for reliable data collection on overhead transmission lines in smart grid", *Computer, Communications and IT Applications Conference* (*ComComApp*), Hong Kong, China, April 2013.

419. Toshiaki Miyazaki, Takafumi Hayashi, Tsuneo Tsukahara, Song Guo, and Junji Kitamichi, "Demand Addressable Sensor Network - Towards Demand-Driven Wide-Area Sensing", *IEICE Technical Committee on Communication Systems*, Invited Talk, IEICE Technical Report, vol. 112, no. 486, CS2012-113, pp.63-68, Yamagata, Japan, March 2013.

420. Peng Li, Song Guo, and Victor Leung, "Improving Throughput by Fine-grained Channel Allocation in Cooperative Wireless Networks", *IEEE Global Telecommunications Conference* (*Globecom*), Anaheim, USA, December 2012.

421. Honglei Jiang, Song Guo, Deze Zeng, and Hai Jin, "Improving Content Availability by Request-Adaptive Incentive in Private Peer-to-Peer Communities", *IEEE Global Telecommunications Conference* (*Globecom*), Anaheim, USA, December 2012.

422. Deze Zeng, Song Guo, Mohsen Guizani, and Baoliu Ye, "All-to-All Throughput Maximization in Wireless Relay Networks with Multiple Packet Reception", *IEEE Global Telecommunications Conference* (*Globecom*), Anaheim, USA, December 2012.

423. Felix Musau, Guojun Wang, Song Guo, and Muhammad Bashir Abdullahi, "Neighbor Similarity Trust against Sybil Attack in P2P E-Commerce", *IEEE International Conference on Autonomic and Trusted Computing* (*ATC*), Fukuoka, Japan, September 2012, pp. 547-554.

424. Deze Zeng, Lei Cong, Huawei Huang, Song Guo, and Hong Yao, "Deadline-Constrained Content Distribution in Vehicular Delay Tolerant Networks", *IEEE International Wireless Communications and Mobile Computing Conference* (*IWCMC*), Limassol, Cyprus, August 2012, pp. 994-999.

425. Peng Li, Song Guo, Weihua Zhuang, and Baoliu Ye, "Capacity Maximization in Cooperative CRNs: Joint Relay Assignment and Channel Allocation", *IEEE International Conference on Communications* (*ICC*), Ottawa, Canada, June 2012, pp. 5097-5101.

426. Deze Zeng, Song Guo, Hai Jin, and Victor Leung, "Dynamic Segmented Network Coding for Reliable Data Dissemination in Delay Tolerant Networks", *IEEE International Conference on Communications* (*ICC*), Ottawa, Canada, June 2012, pp. 63-67.

427. Qinhui Wang, Baoliu Ye, Tianyin Xu, Sanglu Lu, and Song Guo, "DOTA: A Double Truthful Auction for Spectrum Allocation in Dynamic Spectrum Access", *IEEE Wireless Communications and Networking Conference* (*WCNC*), Paris, France, April 2012, pp. 1590-1495.

428. Zhuo Li, Song Guo, Wenzhong Li, Sanglu Lu, Daoxu Chen, and Victor Leung, "A Particle Swarm Optimization Algorithm for Resource Allocation in Femtocell Networks", *IEEE Wireless Communications and Networking Conference* (*WCNC*), Paris, France, April 2012, pp. 1212-1217.

429. An-Ni Shen, Song Guo, Deze Zeng, and Mohsen Guizani, "A Lightweight Privacy-Preserving Protocol using Chameleon Hashing for Secure Vehicular Communications", *IEEE Wireless Communications and Networking Conference* (*WCNC*), Paris, France, April 2012, pp. 2543-2548.

430. Peng Li, Song Guo, Shui Yu, and Athanasios Vasilakos, "CodePipe: An Opportunistic Feeding and Routing Protocol for Reliable Multicast with Pipelined Network Coding", *IEEE International Conference on Computer Communications* (*INFOCOM*), Orlando, USA, March 2012, pp. 100-108.

431. Shui Yu, Song Guo, and Ivan Stojmenovic, "Can We Beat Legitimate Cyber Behavior Mimicking Attacks from Botnets?" *IEEE International Conference on Computer Communications* (*INFOCOM*), Orlando, USA, March 2012, pp. 2851-2855.

432. Deze Zeng, Song Guo, Hai Jin, and Victor Leung, "Segmented Network Coding for Stream-like Applications in Delay Tolerant Networks", *IEEE Global Telecommunications Conference* (*Globecom*), Houston, USA, December 2011.

433. Zhuo Li, Wenzhong Li, Song Guo, Xin Liu, Sanglu Lu, and Daoxu Chen, "Gateway Selection in Disruption Tolerant Networks Using Heuristic Methods", *ACM Asia-Pacific Symposium on Internetware* (*Internetware*), Nanning, China, December 2011.

434. Mengwei Ding, Long Zheng, Yanchao Lu, Li Li, Song Guo, and Minyi Guo, "More Convenient More Overhead: The Performance Evaluation of Hadoop Streaming", *ACM Research in Applied Computation Symposium* (*RACS*), Miami, USA, November 2011.

435. Chih-Hao Hsu, Peng Li, Song Guo, Shui Yu, and Zhuzhong Qian, "Multicast Lifetime Maximization using Network Coding in Lossy Wireless Ad-hoc Networks", *IEEE/IFIP International Conference on Embedded and Ubiquitous Computing* (*EUC*), Melbourne, Australia, October 2011, pp. 95-99.

436. Deze Zeng, Song Guo, Zixue Cheng, and Anh Pham, "IF-THEN in the Internet of Things", *IEEE International Conference on Awareness Science and Technology* (*iCAST*), Dalian, China, September 2011, pp. 503-507.

437. Anh Pham, Truong Cong Thang, Song Guo, and Zixue Cheng, "Performance Bounds for Turbo-Coded SC-PSK/FSO Communications over Strong Turbulence Channels", *IEEE International Conference on Advanced Technologies for Communications* (*ATC*), Da Nang, Vietnam, August 2011.

438. Long Zheng, Yanchao Lu, Minyi Guo, and Song Guo, "Architecture-based Performance Evaluation of Genetic Algorithms on Multi/Many-core Systems", *IEEE International Conference on Computational Science and Engineering* (*CSE*), Dalian, China, August 2011. (**Best Paper Award**)

439. Feilong Tang, Song Guo, Minyi Guo, Minglu Li, and Cho-Li Wang, "Towards Context-Aware Ubiquitous Transaction Processing: a Model and Algorithm", *IEEE International Conference on Communications* (*ICC*), Kyoto, Japan, June 2011.

440. Kun You, Zhuzhong Qiang, Song Guo, Sanglu Lu, and Daoxu Chen, "QoS-aware Service Redeployment in Cloud", *IEEE International Conference on Communications* (*ICC*), Kyoto, Japan, June 2011.

441. Sheng Zhang, Zhuzhong Qiang, Song Guo, and Sanglu Lu, "FELL: A Flexible Virtual Network Embedding Algorithm with Guaranteed Load Balancing", *IEEE International Conference on Communications* (*ICC*), Kyoto, Japan, June 2011.

442. Long Zheng, Yanchao Lu, Jingyu Zhou, Minyi Guo, Hai Jin, and Song Guo, "A Scalable Multiprocessor Architecture for Pervasive Computing", *International Conference on Grid and Pervasive Computing* (*GPC*), Oulu, Finland, May 2011.

443. Shui Yu, Guofeng Zhao, and Song Guo, "Browsing Behavior Mimicking Attacks on Popular Web Sites for Large Botnets", *IEEE INFOCOM Workshop on Security in Computers, Networking and Communications* (*SCNC*), Shanghai, China, April 2011, pp. 947-951.

444. Mianxiong Dong, Sherman Shen, Song Guo, and Minyi Guo, "HARVEST: A Task-objective Efficient Data Collection Scheme in Wireless Sensor and Actor Networks", *International Conference on Communications and Mobile Computing* (*CMC*), Qingdao, China, April 2011.

445. Deze Zeng, Song Guo, Hai Jin, and Shui Yu, "On the Maximum Throughput of Two-Hop Wireless Network Coding", *IEEE Wireless Communications and Networking Conference* (*WCNC*), Cancun, Mexico, March 2011, pp. 416-421.

446. Mengqiao Zhang, Junbo Wang, Zixue Cheng, Lei Jing, Yongping Chen, Kaoru Yamagishi, Song Guo, and Anh T. Pham, "A Remote Mutual Situation-aware Model by Detecting Entrance and Exit Behaviors in Smart Home", *International Conference on Innovative Computing and Communication* (*CICC-ITOE*), Macao, China, March 2011.

447. Peng Li, Song Guo, Hai Jin, and Victor Leung, "Maximum Lifetime Broadcast and Multicast Routing in Unreliable Wireless Ad-hoc Networks", *IEEE Global Telecommunications Conference* (*Globecom*), Miami, USA, December 2010.

448. Deze Zeng, Song Guo, Zhuo Li, and Sanglu Lu, "Performance Evaluation of Network Coding in Disruption Tolerant Networks", *ACM Asia-Pacific Symposium on Internetware* (*Internetware*), Suzhou, China, November 2010.

449. Deze Zeng and Song Guo, "An Energy-Aware MAC Protocol for Wireless Personal Area Networks", *IEEE International Symposium on Aware Computing* (*ISAC*), Tainan, Taiwan, November 2010, pp. 171-176.

450. Mianxiong Dong, Long Zheng, Song Guo, and Minyi Guo, "A Probabilistic-approach based Resource Allocation Algorithm in Pervasive Computing Systems", *IEEE International Conference on Computer Application and System Modeling* (*ICCASM*), Taiyuan, China, October 2010, V11, pp. 315-319.

451. Long Zheng, Hai Jin, Minyi Guo, and Song Guo, "Core-Degree Based Tag Reduction on Chip Multiprocessor to Balance Energy Saving and Performance", *IFIP International Conference on Network and Parallel Computing* (*NPC*), Zheng Zhou, China, September 2010.

452. Long Zheng, Mianxiong Dong, Minyi Guo, and Song Guo, "Exploring the Limits of Tag Reduction for Energy Saving on a Multi-core Processor", *International Symposium on Embedded Multicore Systems-on-chip* (*MCSoC*), San Diego, USA, September 2010.

453. Feilong Tang, Ilsun You, Minyi Guo, and Song Guo, "GridTDK: A Grid Transaction Development Kit", *International Conference on Network-Based Information Systems* (*NBiS*), Takayama, Japan, September 2010, pp. 481-486.

454. Kaoru Ota, Mianxiong Dong, Junbo Wang, Song Guo, Zixue Cheng, and Minyi Guo, "Dynamic Itinerary Planning for Mobile Agents with a Content-Specific Approach in Wireless Sensor Networks", *IEEE Vehicular Technology Conference* (*VTC*), Ottawa, Canada, September 2010.

455. Tao Hu, Minyi Guo, Song Guo, and Hirokazu Ozaki, "MTTF of Composite Web Services", *IEEE International Symposium on Parallel and Distributed Processing with Applications* (*ISPA*), Taipei, Taiwan, September 2010, pp. 130-137.

456. Peng Li and Song Guo, "Energy Minimization on Thread-Level Speculation in Multicore Systems", *International Symposium on Parallel and Distributed Computing* (*ISPDC*), Istanbul, Turkey, July 2010, pp. 125-132.

457. Quan Chen, Daqiang Zhang, Minyi Guo, Qianni Deng, and Song Guo, "SAMR: A Self-adaptive Map-Reduce Scheduling Algorithm in Heterogeneous Environment", *IEEE International Conference on Computer and Information Technology* (*CIT*), Bradford, United Kingdom, June 2010, pp. 2736-2743.

458. Song Guo, Victor Leung, and Zhuzhong Qian, "A Permutation-Based Multi-Polynomial Scheme for Pairwise Key Establishment in Sensor Networks", *IEEE International Conference on Communications* (*ICC*), Cape Town, South Africa, May 2010.

459. Song Guo and Victor Leung, "A Compromise-Resilient Group Rekeying Scheme for Hierarchical Wireless Sensor Networks", *IEEE Wireless Communications and Networking Conference* (*WCNC*), Sydney, Australia, April 2010.

460. Song Guo, Zhuzhong Qian, and Shanglu Lu, "A General Energy Optimization Model for Wireless Networks Using Configurable Antennas", *ACM Symposium on Applied Computing* (*SAC*), Sierre, Switzerland, March 2010.

461. Yao Shen, Feilong Tang, and Song Guo, "A Realistic Interference Model in Ad Hoc Networks", *International Conference on Frontier of Computer Science and Technology* (*FCST*), Shanghai, China, December 2009, pp. 292-297.

462. Tao Hu, Song Guo, and Feilong Tang, "Analysis of the Availability of Composite Web Services", *International Conference on Frontier of Computer Science and Technology* (*FCST*), Shanghai, China, December 2009, pp. 231-237.

463. An-Ni Shen and Song Guo, "A Robust Pair-wise Rekeying Protocol in Hierarchical Wireless Sensor Networks", *ACM International Conference on emerging Networking EXperiments and Technologies* (*CoNEXT*), Rome, Italy, December 2009.

464. Zhuzhong Qian, Song Guo, and Shanglu Lu, "Context-aware Multimedia Processing System in a Pervasive Environment", *IEEE Global Telecommunications Conference* (*Globecom*), Honolulu, USA, December 2009.

465. Feilong Tang and Song Guo "A Context-Aware Model for Transaction Management in Mobile and Pervasive Computing Systems", *International Conference on Mobile Computing, Application, and Services* (*MobiCASE*), San Diego, USA, October 2009.

466. Deze Zeng, Song Guo, and Minyi Guo, "An Accurate and Energy Efficient Fetch Direction Orientation Mechanism for Trace Cache", *International Symposium on Embedded Multicore Systems-on-Chip* (*MCSoC*), Vienna, Austria, September 2009, pp. 566-573.

467. Mianxiong Dong, Song Guo, and Minyi Guo, "A Trade-off Approach to Optimal Resource Allocation Algorithm with Cache Technology in Ubiquitous Computing Environment", *IEEE International Conference on Computational Science and Engineering* (*CSE*), Vancouver, Canada, August 2009, pp. 9-15.

468. Long Zheng, Song Guo, and Minyi Guo, "I-Cache Tag Reduction for Low Power Chip Multiprocessor", *IEEE International Symposium on Parallel and Distributed Processing with Applications* (*ISPA*), Chengdu, China, August 2009, pp. 196-202.

469. Deze Zeng, Song Guo, and Minyi Guo, "The Design and Evaluation of a Selective Way based Trace Cache", *International Conference on Advanced Parallel Processing Technologies* (*APPT*), Rapperswil, Switzerland, August 2009.

470. Peng Li and Song Guo, "Minimizing the Energy Consumption of Behavior-Oriented Parallelization", *International Conference on Parallel and Distributed Processing Techniques and Applications* (*PDPTA*), Las Vegas, USA, July 2009.

471. An-Ni Shen and Song Guo "Key Re-establishment Protocols in Hierarchical Wireless Sensor Networks", *European Wireless* (*EW*), Aalborg, Denmark, May 2009, pp. 184-188.

472. Song Guo, Minyi Guo, and Victor Leung, "Exploring the Multicast Lifetime Capacity of WANETs with Directional Multibeam Antennas", *IEEE International Conference on Computer Communications* (*INFOCOM*), Rio de Janeiro, Brazil, April, 2009, pp. 2686-2690.

473. Chih-Hao Hsu and Song Guo, "Using Domain Ontology to Implement a Frequently Asked Questions System", *World Congress on Computer Science and Information Engineering* (*CSIE*), Los Angeles, USA, April 2009, pp. 714-718.

474. An-Ni Shen and Song Guo, "An Efficient and Scalable Key Distribution Mechanism for Hierarchical Wireless Sensor Networks", *IEEE Sarnoff Symposium* (*Sarnoff*), Princeton, NJ, March 2009.

475. Mianxiong Dong, Song Guo, and Minyi Guo, "An Improved Design of the Ubiquitous Learning System Based on Sensor Networks", *IEEE/IFIP International Conference on Embedded and Ubiquitous Computing* (*EUC*), Shanghai, China, December 2008, pp. 703-708.

476. Song Guo, Minyi Guo, and Victor Leung, "A Performance Guaranteed Distributed Multicast Algorithm for Long-lived Directional Communications in WANETs", *International Conference on High Performance Computing* (*HiPC*), Bangalore, India, December 2008.

477. Mianxiong Dong and Song Guo, "Performance Analysis of Resource Allocation Algorithms Using Cache Technology for Pervasive Computing System", *International Conference for Young Computer Scientists* (*ICYCS*), Zhang Jia Jie, China, November 2008, pp. 671-676.

478. Song Guo, Minyi Guo, and Victor Leung, "A Linear Message Distributed Multicast Algorithm with Guaranteed Directional Communication Lifetime in WANETs", *IEEE International Conference on Mobile Ad-hoc and Sensor Systems* (*MASS*), Atlanta, USA, October 2008.

479. Mianxiong Dong, Song Guo, and Minyi Guo, "Lifetime Approximation Schemes Allow Multicasting with Linear Message Complexity in Wireless Sensor Networks", *IEEE International Conference on High Performance Computing and Communications* (*HPCC*), Dalian, China, September 2008, pp. 703-708. (**Best Paper Award**)

480. Song Guo, Minyi Guo, and Victor Leung, "A Tradeoff Analysis on Message Complexity and Lifetime Optimality for a Distributed Multicast Algorithm in WSNs", *ACM Symposium on Principles of Distributed Computing* (*PODC*), Toronto, Canada, August 2008.

481. Song Guo and Victor Leung, "A Message Complexity Oriented Design of Distributed Algorithm for Long-lived Multicasting in Wireless Sensor Networks", *IEEE International Conference on Computer Communications and Networks* (*ICCCN*), St. Thomas, Virgin Islands, August 2008.

482. Xiaofei Liu and Song Guo, "A Unified Formulation of the Multicast Lifetime Optimization Problem in WANETs", *International Conference on Wireless Networks* (*ICWN*), Las Vegas, USA, July 2008, pp. 381-386.

483. Song Guo, Mianxiong Dong, and Minyi Guo, "A Comparative Analysis of Mobility-based Lifetime-Aware Multicast Routing Protocols for MANETs", *International Conference on Mobile Computing and Ubiquitous Networking* (*ICMU*), Tokyo, Japan, June 2008.

484. Xiaofei Liu, Song Guo, and A. El Saddik, "Communication Complexity Evaluation for Longest-lived Directional Multicasting in WANETs", *IEEE International Conference on Communications* (*ICC*), Beijing, China, May 2008, pp. 3029-3033.

485. Song Guo, Minyi Guo, and Liang Chen, "A Graph Theoretic Approach to Evaluate the Performance of Lifetime-Centric Multicast Algorithms in Ad Hoc Networking", *International Workshop on High Performance and Highly Survivable Routers and Networks* (*HPSRN*), Sendai, Japan, March 2008, pp. 181-189.

486. Mianxiong Dong, Song Guo, and Minyi Guo, "Design of the Ubiquitous Multi-Processor System Focusing on Transmission Data Size", *International Workshop on High Performance and Highly Survivable Routers and Networks* (*HPSRN*), Sendai, Japan, March 2008, pp. 158-166.

487. Song Guo and Minyi Guo, "Performance Analysis of Heuristic Algorithms for Lifetime-Aware Directional Multicasting in Wireless Ad Hoc Networks", *IEEE International Conference on Advanced Information Networking and Applications* (*AINA*), Okinawa, Japan, March 2008, pp. 1311-1316.

488. Song Guo, Oliver Yang, and Victor Leung, "Approximation Algorithms for Longest-lived Directional Multicast Communications in WANETs", *ACM Symposium on Mobile Ad Hoc Networking and Computing* (*MobiHoc*), Montreal, Canada, September 2007, pp. 190-198.

489. Song Guo, Oliver Yang, and Victor Leung, "Improving Scalability for Longest-lived Multicast Using Localized Operations in WANETs", *IEEE Communications Society Conference on Sensor, Mesh, and Ad Hoc Communications and Networks* (*SECON*), San Diego, USA, June 2007, pp. 243-252.

490. Song Guo, Oliver Yang, and Victor Leung, "Analytical Performance Evaluation of Distributed Multicast Algorithms for Directional Communications in WANETs", *IFIP Networking*, Atlanta, USA, May 2007, *Lecture Notes in Computer Science* 4479.

491. Song Guo, Victor Leung, and Liang Chen, "Two Performance Guaranteed Multicast Algorithms for Lifetime Optimization in WANETs", *International Network Optimization Conference* (*INOC*), Spa, Belgium, April 2007.

492. Song Guo, Victor Leung, and Oliver Yang, "Distributed Multicast Algorithms for Lifetime Maximization in Wireless Ad Hoc Networks with Omni-directional and Directional Antennas", *IEEE Global Telecommunications Conference* (*Globecom*), San Francisco, USA, November 2006.

493. Song Guo, Victor Leung, and Oliver Yang, "A Scalable Distributed Multicast Algorithm for Lifetime Maximization in Large-scale Resource-limited Multihop Wireless Networks", *ACM International Wireless Communications and Mobile Computing Conference* (*IWCMC*), Vancouver, Canada, July 2006, pp. 419-424.

494. Song Guo and Victor Leung, "A Distributed Min-Max Tree Algorithm for Maximum-Lifetime Multicast in Resource-limited Wireless Ad Hoc Networks", *IEEE Communications Society Conference on Sensor, Mesh, and Ad Hoc Communications and Networks* (*SECON*), New York, USA, June 2006, pp. 673-677.

495. Song Guo, Victor Leung, and Oliver Yang, "A Distributed Minimum Energy Multicast Algorithm in MANETs", *IEEE Symposium on a World of Wireless, Mobile and Multimedia Networks* (*WoWMoM*), Buffalo, NY, June 2006, pp. 136-142.

496. Song Guo and Oliver Yang, "Performance of Distributed Algorithms for Maximizing Multicast Lifetime in Mobile Ad Hoc Networks", *ACM Workshop on Performance Evaluation of Wireless Ad Hoc, Sensor, and Ubiquitous Networks* (*PE-WASUN*), Montreal, Canada, October 2005, pp. 152-159.

497. Song Guo and Oliver Yang, "Improving Energy Efficiency for Multicasting in Wireless Ad-hoc Networks with Adaptive Antennas", *IEEE International Conference on Wireless and Mobile Computing, Networking and Communications* (*WiMob*), Montreal, Canada, August 2005, pp. 344-351.

498. Song Guo and Oliver Yang, "On upper bound and heuristics for multicast lifetime maximization using dynamic routing in energy-limited wireless ad hoc networks", *IEEE International Conference on Mobile and Ubiquitous Systems: Networks and Services* (*Mobiquitous*), San Diego, USA, July 2005, pp. 426-431.

499. Song Guo and Oliver Yang, "Formulation of Optimal Tree Construction for Maximum Lifetime Multicasting in Wireless Ad-hoc Networks with Adaptive Antennas", *IEEE International Conference on Communications* (*ICC*), Seoul, Korea, May 2005, pp. 3370-3374.

500. Song Guo and Oliver Yang, "Effects of Backup Routes and Cache Timeout Mechanism on Reliable Source Routing in Mobile Ad-hoc Networks", *IEEE International Conference on High Performance Switching and Routing* (*HPSR*), Hong Kong, China, May 2005, pp. 361-365.

501. Song Guo and Oliver Yang, "Multicast Lifetime Maximization for Energy-Constrained Wireless Ad-hoc Networks with Directional Antennas", *IEEE Global Telecommunications Conference* (*Globecom*), Dallas, USA, December 2004, pp. 4120-4124.

502. Song Guo and Oliver Yang, "An Optimal TDMA-Based MAC Scheduling for the Minimum Energy Multicast in Wireless Ad Hoc Network", *IEEE International Conference on Mobile Ad-hoc and Sensor Systems* (*MASS*), Florida, USA, October 2004, pp. 552-554.

503. Song Guo and Oliver Yang, "Minimum Energy Multicast Routing for Wireless Ad-hoc Networks with Adaptive Antennas", *IEEE International Conference on Network Protocols* (*ICNP*), Berlin, Germany, October 2004, pp. 151-160.

504. Song Guo and Oliver Yang, "Minimum-Energy Multicast Routing in Static Wireless Ad Hoc Networks", *IEEE Vehicular Technology Conference* (*VTC*), Los Angeles, USA, September 2004, pp. 3989-3993.

505. Song Guo and Oliver Yang, "Minimum-Energy Multicast Tree Construction in Wireless Ad Hoc Networks", *Queen's Biennial Symposium on Communications* (*QBSC*), Kingston, Canada, June 2004, pp. 156-158.

506. Song Guo and Oliver Yang, "Antenna Orientation Optimization for Minimum-Energy Multicast Tree Construction in Wireless Ad Hoc Networks with Directional Antennas", *ACM Symposium on Mobile Ad Hoc Networking and Computing* (*MobiHoc*), Tokyo, Japan, May 2004, pp. 234-243.

507. Song Guo and Oliver Yang, "A Dynamic Multicast Tree Reconstruction Algorithm for Minimum-Energy Multicasting in Wireless Ad Hoc Networks", *IEEE International Performance Computing and Communications Conference* (*IPCCC*), Phoenix, USA, April 2004, pp. 637-642.

508. Song Guo and Oliver Yang, "Bandwidth Allocation in Wireless Ad-hoc Networks with Minimum-Energy Consumption", *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications* (*PIMRC*), Beijing, China, September 2003, pp. 1059-1063.

509. Hong Guo and Song Guo, "Rough Set Aided Topic Specific E-Mail Filtering", *International Workshop on Pattern Recognition in Information Systems* (*PRIS*), Paris, France, April 2003, pp. 80-87.

510. Hong Guo and Song Guo, "A Topic-Specific Data Filtering Framework Based on Rough Set Theory", *IEEE Canadian Conference on Electrical and Computer Engineering* (*CCECE*), Montreal, Canada, May 2003, pp. 1095-1098.

511. Song Guo and Oliver Yang, "Minimum Energy Broadcast Routing in Wireless Multi-hop Networks", *IEEE International Performance Computing and Communications Conference* (*IPCCC*), Phoenix, USA, April 2003, pp. 273-280.

512. Song Guo and Oliver Yang, "Reliable Routing Algorithm in Mobile Ad Hoc Networks", *IEEE International Conference on Information Networking* (*ICOIN*) 2003, Jeju Island, Korea, Lecture Notes in Computer Science 2662, Springer, 2003, pp. 723-736.

513. Song Guo and Oliver Yang, "Improving Reliability in Mobile Ad-hoc Networks with Backup Source Routing Protocol", *Queen's Biennial Symposium on Communications* (*QBSC*), Kingston, Canada, June 2002.

514. Song Guo and Oliver Yang, "Performance of Backup Source Routing in Wireless Ad hoc Networks", *IEEE Wireless Communications and Networking Conference* (*WCNC*), Orlando, USA, April 2002, pp. 440-444.

515. Song Guo and Oliver Yang, "Backup Source Routing in Wireless Ad hoc Networks", *IEEE International Conference on Software, Telecommunications and Computer Networks* (*SoftCom*), Croatia and Italy, October 2001, pp. 295-302.

516. Song Guo, Sen Su, Fang-Chun Yang, and Jun-Liang Chen, "Open Integrated Intelligent Network: A Universal Service Platform", *IEEE Asia-Pacific Conference on Circuits and Systems* (*APCCAS*), Tianjing, China, December 2000, pp. 74-77.

517. Song Guo and Fangchun Yang, "Open Integrated Intelligent Network Architecture", *International Conference on Information Systems, Analysis and Synthesis* (*ISAS*), Orlando, USA, July 2000.

518. Song Guo and Fangchun Yang, "Open Intelligent Network Architecture: An Overview", *International Conference on Advanced Communication Technology* (*ICACT*), Korea, February 2000.

D. Book Chapters

519. Huawei Huang and Song Guo, "Smartphone based Emergency Communication", *Big Data in Emergency Management: Exploitation Techniques for Social and Mobile Data*, Springer Nature Switzerland AG, August 2020, pp. 131-147.

520. Mengqiao Zhang, Junbo Wang, Zixue Cheng, Lei Jing, Yongping Chen, Kaoru Yamagishi, Song Guo, and Anh T. Pham, "A Remote Mutual Situation-Aware Model by Detecting Entrance and Exit Behaviors in Smart Home", *Lecture Notes in Electrical Engineering*, vol. 155, Springer-Verlag, 2012, pp. 179-187.

521. Song Guo and An-Ni Shen, "A Compromise-resilient Pair-wise Rekeying Protocol in Hierarchical Wireless Sensor Networks", *Wireless Sensor Networks*, InTech, 2010, pp. 315-326.

522. Long Zheng, Minyi Guo, and Song Guo, "TRoCMP: An Approach to Energy Saving for Multi-core Systems", *Multi-core Hardware-Software Design and Verification Techniques*, Bentham Science Publishers, 2010, pp. 33-60.

523. Mianxiong Dong, Long Zheng, Song Guo, and Minyi Guo, "Caching in Ubiquitous Computing Environments: Light and Shadow", *Ubiquitous Computing*, InTech, 2010, pp. 95-110.

524. Long Zheng, Hai Jin, Minyi Guo, and Song Guo, "Core-Degree Based Tag Reduction on Chip Multiprocessor to Balance Energy Saving and Performance", *Lecture Notes in Computer Science*, vol. 6289, Springer-Verlag, 2010, pp. 358-372.

525. Song Guo, Oliver Yang, and Victor Leung, "Performance Evaluation of Energy Efficient Multicast Algorithms for Providing Longest Lifetime in WANETs", *Energy Efficiency Research*, Nova Science Publishers, 2009, pp. 87-112.

526. Deze Zeng, Song Guo, and Minyi Guo, "The Design and Evaluation of a Selective Way based Trace Cache", *Lecture Notes in Computer Science*, vol. 5737, Springer-Verlag, 2009, pp. 95-109.

527. Song Guo, Minyi Guo, and Victor Leung, "A Performance Guaranteed Distributed Multicast Algorithm for Long-lived Directional Communications in WANETs", *Lecture Notes in Computer Science*, vol. 5374, Springer-Verlag, 2008, pp. 439-450.

528. Song Guo, Oliver Yang, and Victor Leung, "Analytical Performance Evaluation of Distributed Multicast Algorithms for Directional Communications in WANETs", *Lecture Notes in Computer Science*, vol. 4479, Springer-Verlag, 2007, pp. 1153-1156.

529. Song Guo and Oliver Yang, "Reliable Routing Algorithm in Mobile Ad Hoc Networks", *Lecture Notes in Computer Science*, vol. 2662, Springer-Verlag, 2003, pp. 723-736.

E. Editorials

530. Sahil Garg, Song Guo, Vincenzo Piuri, Kim-Kwang Raymond Choo, and Balasubramanian Raman, "Guest Editorial Special Issue on Edge-Cloud Interplay Based on SDN and NFV for Next-Generation IoT Applications", IEEE Internet of Things Journal, vol. 7, no. 7, July 2020, pp. 5690-5694.

531. Nei Kato and Song Guo, "Special Section on Emerging Technologies for Disaster Management", *IEEE Transactions* on *Emerging Topics in Computing*, vol. 8, no. 1, January-March 2020, pp. 104-105.

532. Sahil Garg, Mohsen Guizani, Song Guo and Christos Verikoukis, "Guest Editorial: Special Section on AI-Driven Developments in 5G-Envisioned Industrial Automation: Big Data Perspective", *IEEE Transactions on Industrial Informatics*, vol. 16, no. 2, February 2020, pp. 1291-1295.

533. Weizhi Meng, Song Guo, and Zhiyuan Tan, "Security and Privacy for Smart Cities: Challenges and Opportunities", *Elsevier Computers & Electrical Engineering*, to appear.

534. Xuan Song, Song Guo, and Haizhong Wang, "Guest editorial: special issue on big data for effective disaster management", *World Wide Web*, vol. 22, no. 5, September 2019, pp. 1889-1891.

535. Maurizio Casoni, Song Guo, and Abderrahim Benslimane, "Editorial: Emergency Networks and Future Public Safety Systems", *Wireless Communications and Mobile Computing*, vol. 2019, Article ID 1647092, https://doi.org/10.1155/2019/1647092

536. Song Guo, Zhen Liu, and Peng Li, "Editorial: Big Data and Cyber-Physical-Social Computing", *Mobile Networks and Applications*, vol. 24, 2019, pp. 1346-1347.

537. Flavia C. Delicato, Xiaokang Zhou, Kevin Wang, and Song Guo, "Special Issue: Advances and trends on cognitive cyber-physical systems", *Ad Hoc Networks*, vol. 88, May 2019, pp. 1-4.

538. Xiaofei Liao, Song Guo, Deze Zeng, and Kun Wang, " Guest editorial: Special issue on Big Data Networking", *Peer-to-Peer Networking and Applications*, vol. 56, no. 5, September 2018, pp. 989-991.

539. Jinsong Wu, John Thompson, Honggang Zhang, Rangarao Venkatesha Prasad, and Song Guo, "Green Communications and Computing Networks", *IEEE Communications Magazine*, vol. 56, no. 5, May 2017, pp. 138-139.

540. Alessandro Vanelli-Coralli, Tomaso de Cola, Frederik Simoens, Bassel F. Beidas, Song Guo, and Alberto Ginesi, "Advances in Satellite Communications - Part 2", *IEEE Journal on Selected Areas in Communications*, vol. 36, no. 5, May 2018, pp. 967 - 970.

541. Alessandro Vanelli-Coralli, Tomaso de Cola, Frederik Simoens, Bassel F. Beidas, Song Guo, and Alberto Ginesi, "Advances in Satellite Communications - Part 1", *IEEE Journal on Selected Areas in Communications*, vol. 36, no. 2, February 2018, pp. 217 - 220.

542. Song Guo, Victor Leung, and Xin Yao, "Intelligence in the Cloud", *IEEE Cloud Computing*, vol. 4, no. 6, November/December 2017, pp. 2-4.

543. Jinsong Wu, John Thompson, Honggang Zhang, Rangarao Venkatesha Prasad, and Song Guo, "Green Communications and Computing Networks", *IEEE Communications Magazine*, vol. 55, no. 5, May 2017, pp. 160-161.

544. Deze Zeng, Song Guo, and Bo Li, "Editorial for Special Issue on Social Computing", *Mobile Networks and Applications*, vol. 22, no. 2, April 2017, pp. 151-152.

545. Jinsong Wu, John Thompson, Honggang Zhang, Rangarao Venkatesha Prasad, and Song Guo, "Green Communications and Computing Networks", *IEEE Communications Magazine*, vol. 54, no. 11, November 2016, pp. 134-135.

546. Song Guo and Jiajia Liu, "Large-Scale Internet of Things", *IEEE Internet of Things Journal*, vol. 3, no. 4, August 2016, pp. 439-440.

547. Jinsong Wu, John Thompson, Honggang Zhang, Rangarao Venkatesha Prasad, and Song Guo, "Green Communications and Computing Networks", *IEEE Communications Magazine*, vol. 54, no. 5, May 2016, pp. 106-107.

548. Song Guo, Shui Yu, Jie Li and Nirwan Ansari, "Big Data for Networking", *IEEE Network Magazine*, vol. 30, no. 1, January/February 2016, pp. 4-5.

549. Song Guo, Yi Pan, and Qiangfu Zhao, "Special Issue on Awareness in Sensor Networks", *International Journal of Sensor Networks*, vol. 19, no. 3/4, 2015, pp. 139-140.

550. Nei Kato, Song Guo, and Vojislav Misic, "Emerging Mobile and Ubiquitous Systems - Part II", *IEEE Transactions* on *Emerging Topics in Computing*, vol. 3, no. 3, September 2015, pp. 305-306.

551. Nei Kato, Song Guo, and Vojislav Misic, "Emerging Mobile and Ubiquitous Systems - Part I", *IEEE Transactions* on *Emerging Topics in Computing*, vol. 3, no. 1, March 2015, pp. 5-7.

552. Song Guo, "Special Issue on Cyber-Physical Systems", *International Journal of Parallel, Emergent and Distributed Systems*, vol. 29, no. 3, 2014, pp. 213-214.

553. Song Guo, Hannes Frey, Kato Nei, and Yunhao Liu, "Special Issue on Cyber-Physical Systems (CPS) - Part II", *IEEE Transactions on Emerging Topics in Computing*, vol. 1, no. 2, December 2013, pp. 203-206.

554. Song Guo, Hannes Frey, Kato Nei, and Yunhao Liu, "Special Issue on Cyber-Physical Systems (CPS) - Part I", *IEEE Transactions on Emerging Topics in Computing*, vol. 1, no. 1, June 2013, pp. 6-9.

F. Patents

555. Toshiaki Miyazaki, Peng Li, and Song Guo, "Resilient Information System and its Server/ Terminal Devices", P160013556, Japan, April 2017.