

# Song Guo

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## PERSONAL INFORMATION

*Citizenship* Canadian

## EDUCATION

<b>Ph.D.</b>	Computer Science University of Ottawa, Canada	2001–2005
<b>M.E.</b>	Computer Engineering Beijing University of Posts and Telecommunications, China	1995–1998
<b>B.E.</b>	Computer Engineering Huazhong University of Science and Technology, China	1991–1995

## PROFESSIONAL EXPERIENCE

- *Full Professor*, Department of Computing, The Hong Kong Polytechnic University, 2016-present
- *Changjiang Scholar Chair Professor* (visiting), School of Computer Science, Wuhan University, China, 2020-present
- *Full Professor*, School of Computer Science and Engineering, The University of Aizu, Japan, 2014-2016
- *Senior Associate Professor*, School of Computer Science and Engineering, The University of Aizu, Japan, 2011-2013
- *Associate Professor*, School of Computer Science and Engineering, The University of Aizu, Japan, 2007-2011
- *Assistant Professor*, Department of Computer Science, University of Northern British Columbia, Canada, 2006-2007
- *Postdoctoral Fellow*, University of British Columbia, Canada, 2006
- *Co-founder, Chief Software Architect*, Liska Biometry Inc. (Ottawa), Canada, 2001-2016

## RESEARCH INTERESTS

Edge AI, Big Data and Cloud Computing, Wireless Networking, Emergency Network, Mobile Computing, and Distributed System

## HONORS AND AWARDS

- Fellow of the Canadian Academy of Engineering, 2021.
- IEEE Fellow (Computer Society) for contributions to high performance and resilient distributed computing, 2020.
- Fellow of Asia-Pacific Artificial Intelligence Association (AAIA), 2021.
- Highly Cited Researcher, Clarivate Web of Science, 2020 & 2021.
- Changjiang (Yangtze River) Scholar Award, Ministry of Education, China, 2019.
- ACM Distinguished Member, 2021.
- Japan Society for the Promotion of Science (JSPS) Fellowship 2021.
- World top 2% scientists by Stanford University, 2021.
- Faculty of Engineering Research Grant Achievement Award 2020, The Hong Kong Polytechnic University, 2022.
- Silver Medal, the 6th China “Internet+” Innovation and Entrepreneurship Competition, as supervisor. In 2020, the competition drew 6.32 million participants, 1.48 million teams, from 4,146 colleges and universities in 124 countries and regions. The quality of the competition hit a record high, and the proportion of silver medals and above awards in the competition was about 0.03%.
- Student Innovation Grand Award, 2021 Hong Kong ICT Awards, as supervisor.
- Silver Medal, Dr.Body: Posture Detection and Rehabilitation Tracking System, the 12th “Challenge Cup” Competition, as supervisor.
- Second Prize (semi-finals) and Third Prize (final), Dr. Body: non-radiative bad posture detection and management system, the 4th China Medical Device Innovation and Entrepreneurship Competition for household, traditional Chinese medicine, rehabilitation physiotherapy and sports health equipment, 2021.
- Senior Member of the China Computer Federation (CCF), 2020.
- 2020 CCF Distinguished Speaker.
- IEEE Transactions on Cloud Computing Editorial Excellence and Eminence Award, 2019 & 2020.
- Faculty Award for Outstanding Achievement in Research and Scholarly Activities 2019/20, The Hong Kong Polytechnic University, 2021.
- 2020 Hong Kong Social Enterprise Competition Intellectual Property Ambassador Award, as su-

pervisor.

- First Prize of the National Finals of the 2019 SJTU-Weining Health Smart Medical Challenge, Heal Boys: Spine Doctor Non-invasive Spine Three-dimensional Evaluation System.
- 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.
- Distinguished Lecturer, IEEE Communications Society, 2016-2017.
- First Prize, ComSoc Student Competition 2016, as supervisor.
- Outstanding Leadership Award received in the IEEE International Conference on Big Data Intelligence and Computing (DataCom), 2016.
- Outstanding Service Award received in the IEEE International Conference on Embedded Software and Systems (ICCESS), 2012 & 2010.
- Outstanding Leadership Award received in IEEE International Symposium on Parallel and Distributed Processing with Applications (ISPA), 2008.
- Funai Information Technology Award, The Funai Foundation for Information Technology, Japan, 2007.
- NSERC Postdoctoral Fellowship Award, Canada, 2006.
- Ontario Graduate Scholarship, Canada, 2002-2005.
- Excellence Scholarship, University of Ottawa, 2001-2005.

## **BEST PAPER AWARDS**

- 2020 Best Paper Award for IEEE Transactions on Computers, IEEE Computer Society Publications Board, 2022, for the paper “A Deep Reinforcement Learning based Offloading Game in Edge Computing” , IEEE Transactions on Computers, vol. 69, no. 6, June 2020, pp. 883-893.
- Best Track Paper Award, “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.
- Best Paper Award Runner Up, “SkyChain: A Deep Reinforcement Learning-Empowered Dynamic Blockchain Sharding System” , International Conference on Parallel Processing (ICPP), Edmonton, Canada, August 2020.
- 2019 IEEE Systems Journal Best Paper Award, the IEEE Systems Council, for the paper “A Survey on Energy Internet: Architecture, Approach, and Emerging Technologies” , IEEE Systems Journal, vol. 12, no. 3, September 2018, pp. 2403-2416.

- 2019 IEEE ComSoc Technical Committee on Big Data (TCBD) Best Conference Paper Award, “Making Big Data Open in Collaborative Edges: A Blockchain-Based Framework with Reduced Resource Requirements” , IEEE ICC 2018, Kansas City, MO, USA, May 2018.
- 2018 IEEE ComSoc Technical Committee on Green Communications and Computing (TCGCC) Best Magazine Paper Award, for the paper “Green Industrial Internet of Things Architecture: An Energy-efficient Perspective” , IEEE Communications Magazine, vol. 54, no. 12, December 2016, pp. 48-54.
- Best Student Paper Award, “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.
- 2017 IEEE Systems Journal Best Paper Award, the IEEE Systems Council, for the paper “Big Data Meet Green Challenges: Big Data toward Green Applications” , IEEE Systems Journal, vol. 10, no. 3, September 2016, pp. 888-900.
- Best Paper Award, “Big Data Analytics for Price Forecasting in Smart Grids” , IEEE Global Telecommunications Conference (Globecom), Washington DC, USA, December 2016.
- Best Paper Award, “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, “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, “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, “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, “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.

## GRANTS

53. RGC General Research Fund (GRF), “Collaborative Training in Resource-constrained Edge Networks via Generative Mutual Knowledge Transfer” , 2022-2024, PI, 1,093,580 HKD.
52. The Key-Area Research and Development Program of Guangdong Province on the New Generation of Artificial Intelligence, Grand Project “The development and application of open system of edge computing for human-machine collaboration” , 2021-2024, Co-PI, 34,000,000 RMB.
51. PolyU Postdoc Matching Fund Scheme - Jing LI, 2022-2024, PI, 547,716 HKD.
50. PolyU Postdoc Matching Fund Scheme - Hao REN, 2022-2023, PI, 365,400 HKD.
49. Public Policy Research Funding Scheme, “Modeling over-tourism in Hong Kong using machine learning and social media data” , 2021-2022, Co-I, 223,100 HKD.
48. PolyU Project of Strategic Importance, “Crowdsourced Mobile Video Analytics for Emerging Realtime Risk Management in Smart Cities” , 2021-2022, PI, 2,000,000 HKD.
47. PolyU Interdisciplinary Research Fund in Smart Cities, “High Definition (HD) Map for Autonomous Driving in Smart Cities” , 2021-2023, Co-I, 1,000,000 HKD.
46. PolyU Research Institute for Sustainable Urban Development (RISUD) Emerging Frontier Area (EFA) Research Project, “Towards a digital-twin system for smart mobility for people with disabilities (PwDs) using 3D LiDAR modeling and urban big data analytics” , Co-I, 2021-2024, 977,000 HKD.
45. PolyU Intra-Faculty Interdisciplinary Project, “Exo-neuro-musculo-skeleton (ENMS) based on Corticomuscular Integrated Control and Cyber Physical Social System (CPSS) for Grouped Tele-rehabilitation of Wrist-Hand after Stroke” , 2021-2022, Co-I, 400,000 HKD.
44. Key Project of Basic Research of Shenzhen Science and Technology Innovation Committee, “Research on Cloud Edge Collaborative Learning Architecture and Key Optimization Theory” , 2021-2023, PI, 2,500,000 CNY.
43. RGC General Research Fund (GRF), “Federated Learning with Non-IID Data over Resource-Constrained Mobile Edge Networks” , 2021-2023, PI, 1,057,394 HKD.
42. Hong Kong Scholars Program, “Federated Learning over Resource-Constrained Mobile Edge Networks” , 2021-2023, PI, 800,000 HKD.

41. 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, 5,700,000 NOK.
40. 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.
39. PolyU Postdoctoral Fellowships Scheme, “Human Tracking with Embedded Sensors on Collaborative Multiple Smart Devices” , 2020-2022, PI, 799,800 HKD.
38. Chinese National Engineering Research Centre (CNERC), “Data Analytics and Machine Learning Algorithms for Smart Transportation Systems” , 2020-2021, PI, 500,000 HKD.
37. RGC General Research Fund (GRF), “Proactive and Cooperative Resource Allocation in Wide-scale Edges” , 2020-2022, PI, 935,141 HKD.
36. PolyU Data Science & AI Lab, “The Enabling Technologies for Mutual Enhancement between Machine Learning and Communication at the Edge” , 2019-2021, PI, 363,000 HKD.
35. Consultancy Project with Esquel Enterprises Limited, “Bitmap Conversion for Label Artwork Patterning” , 2019-2020, PI, 156,000 HKD.
34. 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.
33. RGC Collaborative Research Fund (CRF), “Multi-stage Big Data Analytics for Complex Systems: Methodologies and Applications” , 2019-2022, Co-PI, 3,661,193 HKD.
32. PolyU Postdoctoral Fellowships Scheme, “Highly-Efficient Data Dissemination in Mobile Edge Computing Enabled Internet of Vehicles” , 2019-2021, PI, 771,000 HKD.
31. Collaborative Research with Huawei Technologies Co., Ltd., “Ethernet Transport Network Performance Simulation” , 2018-2019, PI, 771,150HKD.
30. NSFC (National Natural Science Foundation of China), General Research, “Edge Intelligence Oriented Resource Management and Deployment Optimization” , 2019-2022, PI, 640,000 RMB.
29. Collaborative Research with Guilin Medical Group, “MioTChain” , 2018 –2019, PI, 1,000,270 HKD.

28. 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.
27. 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.
26. Shenzhen Basic Research Funding Scheme, “Task Scheduling of Multi-platform Computing Resources in Mobile Crowdsourcing Networks” , 2018-2019, PI, 300,000 CNY.
25. 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.
24. 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. Shanghai Science and Technology Innovation Action Plan - 2018 Hong Kong, Macao and Taiwan Science and Technology Cooperation Project, “Research on Big Data Processing Technology for Smart City Based on Cloud and Fog Hybrid System” , 2018-2021, Co-PI, 400,000 RMB.
22. 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.
21. PolyU Internal Competitive Research Grant (CRG), “Optimized Request Admissions in NFV-Enabled Software-Defined Networks” , 2017-2019, PI, 105,000 HKD.
20. PolyU Joint Supervision Scheme, “Bandwidth Guaranteed Virtual Network Function Placement on NUMA Machines” , 2017-2018, PI, 154,500 HKD.
19. PolyU COMP Start-up Fund, “Self-adaptive Platform for Big Spatial-Temporal Data Analytics” , 2016-2019, PI, 1,500,000 HKD.
18. 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.
17. 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.
16. 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.
  15. JST SIP (Cross-ministerial Strategic Innovation Promotion Program) on Enhancement of Societal Resiliency against Natural Disasters, 2015 –2017, Co-I, 25,000,000 JPY.
  14. 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.
  13. Fukushima Revitalization Research Fund, “Development of a Resilient Information Management System Applicable under Network-isolated Environment” , 2013 –2014, PI, 10,000,000 JPY.
  12. 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.
  11. A3 Foresight Program funded by JSPS (Japan), NSFC (China) and NRF (Korea), 2012 –2014, Co-I, 28,000,000 JPY.
  10. NSFC (National Natural Science Foundation of China), General Research, “On Practical Network Coding Techniques for Wireless Networks” , 2014-2016, Co-PI, 800,000 RMB.
  9. 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.
  8. Joint Research Fund of Olympus Corporation, “Context-Aware System Guaranteeing Quality of Service for a Wide Area” , 2011-2013, PI, 10,000,000 JPY.
  7. 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.
  6. University of Aizu Competitive Research Fund, 2008-2015, PI, 10,000,000 JPY.
  5. 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.



4. 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.
3. Joint Research Fund of Olympus Corporation, “New Models of Grid and Ubiquitous Computing for Image Processing” , 2008-2010, PI, 10,000,000 JPY.
2. Professional Development Fund, University of Northern British Columbia, 2006, 2,000 CAD.
1. NSERC Postdoctoral Research Fund, University of British Columbia, Canada, 2006, 27,000 CAD.

## SCHOLARLY ADDRESSES

88. Keynote, International Conference on Artificial Intelligence, Automation and Algorithms (AI2A), Hangzhou, China, July 2022
87. Keynote, IEEE International Conference on High Performance Switching and Routing (HPSR), Taicang, China, June 2022
86. Keynote, Workshop on Satellite Mega-Constellations in the 6G Era (6GSATCOMNET), in conjunction with IEEE International Conference on Communications (ICC), Seoul, South Korea, May 16–20, 2022
85. Keynote, AAIA’s Greater Bay Area Artificial Intelligence Online Summit, April 2022
84. Invited Seminar, Suzhou University, April 2022
83. Frontier Academic Report, Institute of Cryptography and Data Security, Beijing Institute of Technology, March 2022
82. Data Science and Analytics Webinar, HKUST (GZ), March 2022
81. Keynote, International Workshop on Edge Computing and Security, Chengdu, China, January 2022
80. Keynote, International Conference on Information and Communication Technologies for Disaster Management (ICT-DM), Hangzhou, China, December 2021
79. Keynote, Expert Workshop on Industrial Intelligent Vision Technology, Shenzhen, China, December 2021
78. Keynote, IEEE International Conference on Wireless Communications and Signal Processing (WCSP), Nanjing, China, October 2021

77. Keynote, IEEE International Conference on Space-Air-Ground Computing (SAGC), Huizhou, China, October 2021
76. Keynote, IEEE International Symposium on Blockchain, September 2021
75. Invited Talk, Wutong Forum, Shenzhen, August 2021
74. Invited Seminar, E4C summer school “From Smart Buildings to Smart Cities” , The Institut Polytechnique de Paris, July 2021
73. Invited Talk, International Symposium on Network Security and Intelligent Communication, Northwestern Polytechnical University , June 2021
72. Keynote, Hong Kong Symposium on Artificial Intelligence and Robotics, May 2021.
71. Keynote, IEEE Workshop on Deep Learning, Hong Kong Chapter, March 2021.
70. Panelist, Hong Kong Artificial Intelligence and Robotics Conference, March 2021.
69. 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.
68. Distinguished Lecturer Talk, IEEE VTS Nanjing Chapter, December 2020.
67. Keynote, the 8th International Conference on Information Technology: IoT and Smart City (ICIT), December 2020.
66. Invited Talk, 2020 Canberra Artificial Intelligence Summer School – “Artificial Intelligence is For Everyone” , December 2020.
65. Keynote, 2020 University Alliance of the Silk Road (USAR) Workshop on Security for Cyber Space, Xi’ an Jiao Tong University, November 2020.
64. Keynote, “Deep Reinforcement Learning-Empowered Blockchain: Security Challenges and Solutions” , Mainland-Hong Kong research forum on the Advances in Cybersecurity, October 2020.
63. Keynote, “Edge Learning and Smart Cities: From Cloud to Edge” , China National Computer Congress (CNCC) Technology Forum on 5G Edge Intelligence and Smart City, October 2020
62. Keynote, the 11th China Computer Federation (CCF) Conference on Service Computing and the 13th International Conference on Service Science, Theme Forum on Internet Services, August 2020

61. Keynote, CCF Computer Architecture Academic Annual Conference on Edge Intelligence and Future Architecture, August 2020
60. Keynote, IEEE INFOCOM Workshop on Intelligent Cloud Computing and Networking (ICCN), Beijing, China, July 2020
59. Keynote, “Breaking through the Intelligent Bottleneck: Challenges and Prospects of Federated Learning Based on Edge Computing”, CCF Young Computer Scientists & Engineers Forum (YOCSEF) Shenzhen Online Forum - Federated Learning: The Last Mile of Artificial Intelligence, March 2020
58. Keynote, International Conference on Blockchain and Trustworthy Systems (BlockSys), Guangzhou, China, December 2019
57. Keynote, IEEE Globecom Workshop on Intelligent and Cognitive Space, Terrestrial and Ocean Internet, Systems and Applications, Waikoloa, USA, December 2019
56. Invited Talk, Wuhan University Artificial Intelligence Research Institute Inaugural Conference and International Symposium on Artificial Intelligence, Wuhan, China, November 2019
55. Invited Talk, Ping An Technology, Shenzhen, China, October 2019
54. Invited Talk, Workshop on Big Data for Emergency Management (BDEM 2019), Sogndal, Norway, October 2019
53. Invited Talk, Beijing University of Posts and Telecommunications, Beijing, China, October 2019
52. Keynote, Cybersecurity and Future Webinar in the Intelligent Era, Tianjin University, Tianjing, China, August 2019
51. Keynote, International Workshop on Intelligent Networks and Edge Computing (INEC), Sun Yat-sen University, Guangzhou, August 2019
50. Invited Talk, Xidian University, July 2019
49. Invited Talk, Xi’an Jiaotong University, July 2019
48. Keynote, International Conference on Data Science and Information Technology (DSIT), Seoul, Korea, July 2019
47. Keynote, 12th EAI International Conference on Mobile Multimedia Communications (MOBIMEDIA 2019), Weihai, China, June 2019

46. Invited Talk, Macquarie University, May 2019
45. Invited Talk, Deakin University, May 2019
44. Keynote, International Conference on Advances in Computer Technology, Information Science and Communications (CTISC), Xiamen, China, March 2019
43. Keynote, Future Internet Forum 2019 (FIF 2019), Dalian, China, January 2019
42. Keynote, International Conference on Information Technology (ICIT), Hong Kong, December 2018
41. Keynote, BUPT Information Technology International Forum for Young Scholars, Beijing, China, December 2018
40. Keynote, IEEE International Workshop on Future Network Computing (FNC), Changsha, China, October 2018
39. Invited Talk, Advanced Technology Forum on Computer Network, School of Information Science and Engineering, Central South University, Changsha, China, October 2018
38. Keynote, IEEE International Conference on Cloud and Big Data Computing (CBDCOM), Guangzhou, China, October 2018
37. Keynote, International Conference on Data Science and Information Technology (DSIT), Singapore, July 2018
36. Keynote, International Conference on Mobile Multimedia Communications (MobiMedia), Qingdao, China, June 2018
35. Keynote, International Workshop on Future Advanced Networks Technology (FANT), Shanghai, China, May 2018
34. Keynote, International Conference on Information Science and System (ICISS), Jeju Island, South Korea, April 2018
33. Panellist, IEEE HPCC/SmartCity/DSS, Bangkok, Thailand, December 2017
32. Keynote, International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (Qshine), Dalian, China, December 2017
31. Invited Talk, Forum on Frontier Technology of Data-center and System Software, HUST, Wuhan, December 2017

30. Invited Talk, Forum on Frontier Technology of Internet Plus, CUG, Wuhan, December 2017
29. Keynote, Big Data and Networking, Aizu-Wakamatsu, Japan, November 2017
28. Invited Talk, Forum on Future Computing, Shanghai, China, August 2017
27. 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
26. Keynote, “Learning based Quality-aware Crowdsourcing” , 2017 Cross-Strait Research Forum, Beijing, China, July 2017
25. 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
24. Invited Talk, Hosei University, Tokyo, Japan, November 2016
23. Invited Talk, Forum on Future Computing, Chengdu, China, August 2016
22. Panellist, “Evolution of Cyber-Physical Systems” , IEEE CyberSciTech/DASC/PICom/ DataCom 2016, Auckland, New Zealand, August 2016
21. Keynote, “Traffic-aware Geo-distributed Big Data Analytics with Predictable Performance” , IEEE 2016 CyberSciTech/DASC/PICom/DataCom, Auckland, New Zealand, August 2016
20. Keynote, “Vehicle-Assisted Disaster Management” , International Workshop on Vehicular Networks and Smart Cities, Shanghai, China, June 2016
19. Invited Talk, “Protection of Big Data Privacy” , International Forum on Cyber Security, Beijing, China, June 2016
18. Invited Talk, Beijing University of Posts and Telecommunications, Beijing, China, January 2016
17. Invited Talk, Nanjing University, Nanjing, China, January 2016
16. Keynote, “False-name-proof Auctions for Cloud Resource Allocation” , IEEE SmartCity / Social-Com / SustainCom 2015 International Conferences, Chengdu, China, December 2015
15. 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

14. Keynote, CCF Technical Committee on Computer Applications Annual Conference, Maoming, China, August 2015
13. Keynote, International Workshop on Network Computing and Data Management, Dalian, China, July 2015
12. Invited Talk, Jinan University, Guangzhou, China, July 2015
11. Invited Talk, Aizu IT AKI Forum, Aizu-Wakamatsu, Japan, October 2014
10. Keynote, International Workshop on Future Trends of Big Data, Systems, and Networking, Melbourne, Australia, September 2014
9. Invited Talk, Huazhong University of Science and Technology, Wuhan, China, September 2014
8. Keynote, CCF Technical Committee on Open Systems Annual Conference, Xiangyang, China, September 2014
7. Invited Presentation, IEEE International Conference on Computer Communications and Networks, Nassau, Bahamas, July 2013
6. Invited Talk, Forum on Future Computing, Shanghai, China, April 2013
5. Invited Presentation, International Conference on Computing, Networking and Communications, San Diego, USA, January 2013
4. Invited Talk, Central South University, Changsha, China, November 2011
3. Invited Talk, University of New South Wales, Canberra Campus, Australia, June 2011
2. Invited Talk, ACM Asia-Pacific Symposium on Internetware, Suzhou, China, November 2010
1. Invited Talk, Nanjing University, Nanjing, China, May 2010

## PUBLICATIONS

### Books

- B12. Song Guo and Zhihao Qu, Edge Learning for Distributed Big Data Analytics: Theory, Algorithms, and System Design, Cambridge University, ISBN-13: 9781108832373, 2022.
- B11. Baoliu Ye, Weihua Zhuang, and Song Guo (Eds.), 5G for Ubiquitous Connectivity, Book Series of EAI/Springer Innovations in Communication and Computing, ISBN: 978-3-030-22316-8, 2020.

- B10. 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.
- B9. Song Guo and Deze Zeng (Eds.), Cyber-Physical Systems: Architecture, Security and Application, Book Series of EAI/Springer Innovations in Communication and Computing, ISBN 978-3-319-92564-6, 2019.
- B8. Song Guo, Guiyi Wei, Yang Xiang, Xiaodong Lin, and Pascal 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.
- B7. Shui Yu and Song Guo (Eds.), Big Data Concepts, Theories, and Applications, Springer 2016, ISBN: 978-3-319-27761-5.
- B6. Lin Gu, Deze Zeng, and Song Guo, Cloud Networking for Big Data, Springer 2015, ISBN: 978-3-319-24718-2.
- B5. Peng Li and Song Guo, Cooperative Device-to-Device Communication in Cognitive Radio Cellular Networks, Springer 2014, ISSN: 2191-5768.
- B4. Song Guo and Xiaofei Liao (Eds.), Collaborative Computing: Networking, Applications, and Work-sharing, CollaborateCom 2015 Proceedings, ISBN: 978-3-319-28910-6, Springer 2016.
- B3. 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.
- B2. 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.
- B1. Song Guo (Ed.), Advanced Wireless LAN, ISBN: 978-953-51-0645-6, InTech, 2012.

### **Refereed Journal Papers**

- J328. Yuxuan Liang, Chen Li, Jin Zhao, Yangqing Zeng, Hang Hu, Yu Zhang, Fubing Mao, Xiaofei Liao, Ji Zhang, Lin Gu, Song Guo, Hai Jin, Haikun Liu, and Biao Wang, “EGraph: Efficient Concurrent GPU-based Large-scale Dynamic Graph Processing” , IEEE Transactions on Knowledge and Data Engineering, accepted.

- J327. Xin Xie, Xiulong Liu, Junxiao Wang, Song Guo, Heng Qi, and Keqiu Li, “Efficient Integrity Authentication Scheme for Large-scale RFID Systems” , IEEE Transactions on Mobile Computing, accepted.
- J326. Tianle Mai, Haipeng Yao, Jiaqi Xu, Ni Zhang, Qifeng Liu, and Song Guo, “Automatic Double-Auction Mechanism for Federated Learning Service Market in Internet of Things” , IEEE Transactions on Network Science and Engineering, DOI: 10.1109/TNSE.2022.3170336.
- J325. Junbo Wang, Amitangshu Pal, Kaiming Zhu, Krishna Kant, and Song Guo, “Collaborative Machine Learning: Schemes, Robustness and Privacy” , IEEE Transactions on Neural Networks and Learning Systems, accepted.
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- C258. Rui Zhang, Song Guo, Junxiao Wang, Xin Xie, and Dacheng Tao, “A Survey on Gradient Inversion: Attacks, Defenses and Future Directions” , the 31st International Joint Conference on Artificial Intelligence and the 25th European Conference on Artificial Intelligence (IJCAI-ECAI), Vienna, Austria, July 23-29, 2022.
- C257. Leijie Wu, Song Guo, Yi Liu, Zicong Hong, Yufeng Zhan, and Wenchao Xu, “Sustainable Federated Learning with Long-term Online VCG Auction Mechanism” , IEEE International Conference on Parallel and Distributed Systems (ICDCS), Bologna, Italy, July 10-13, 2022.
- C256. Quan Chen, Song Guo, Wenchao Xu, Zhipeng Cai, Lianglun Cheng, and Hong Gao, “AoI Minimization Charging at Wireless-Powered Network Edge” , IEEE International Conference on Parallel and Distributed Systems (ICDCS), Bologna, Italy, July 10-13, 2022.
- C255. Feijie Wu, Shiqi He, Song Guo, Zhihao Qu, Haozhao Wang, Weihua Zhuang and Jie Zhang, “Sign Bit is Enough: A Learning Synchronization Framework for Multi-hop All-reduce with Ultimate

Compression” , the 59th Design Automation Conference (DAC), San Francisco, USA, July 10-14, 2022.

- C254. Fahao Chen, Peng Li, Celimuge Wu, and Song Guo, “Hare: Exploiting Inter-job and Intra-job Parallelism of Distributed Machine Learning on Heterogeneous GPUs” , the 31st ACM Symposium on High-Performance Parallel and Distributed Computing (HPDC), Minneapolis, USA, June 27 - July 1, 2022
- C253. Zicong Hong, Song Guo, Rui Zhang, Peng Li, Yufeng Zhan, and Wuhui Chen, CYCLE: Sustainable Off-Chain Payment Channel Network with Asynchronous Rebalancing, the 52nd Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN), Baltimore, USA, June 27-30, 2022.
- C252. Xiaosong Ma, Jie Zhang, Song Guo, and Wenchao Xu, Layer-wised Model Aggregation for Personalized Federated Learning, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), New Orleans, USA, June 19-24, 2022.
- C251. Yuepeng Li, Deze Zeng, Lin Gu, Kun Wang, and Song Guo, “On the Joint Optimization of Function Assignment and Communication Scheduling toward Performance Efficient Serverless Edge Computing” , IEEE/ACM International Symposium on Quality of Service (IWQoS), June 10-12, 2021.
- C250. Yanjie Dong, Haijun Zhang, Jianqiang Li, F. Richard Yu, Song Guo, and Victor C. M. Leung, “An Online Throughput Maximization for Green Coordinated Multi-piont System” , IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Singapore, May 22-27, 2022.
- C249. Junxiao Wang, Song Guo, Xin Xie, and Heng Qi, “Protect Privacy from Gradient Leakage Attack in Federated Learning” , IEEE Conference on Computer Communications (INFOCOM), May 2-5, 2022.
- C248. Huawei Huang, Xiaowen Peng, Jianzhou Zhan, Shenyang Zhang, Yue Lin, Zibin Zheng, and Song Guo, “BrokerChain: A Cross-Shard Blockchain Protocol for Account/Balance-based State Sharding” , IEEE Conference on Computer Communications (INFOCOM), May 2-5, 2022.
- C247. Junxiao Wang, Song Guo, Xin Xie and Heng Qi, “Federated Unlearning via Class-Discriminative Pruning” , The Web Conference (WWW), Online, Lyon, France, April 25-29, 2022.
- C246. Jie Zhang, Song Guo, Xiaosong Ma, Haozhao Wang, Wenchao Xu, and Feijie Wu, Parameterized Knowledge Transfer for Personalized Federated Learning, 2021 Conference on Neural Information

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- C245. Yuepeng Li, Deze Zeng, Lin Gu, Quan Chen, Song Guo, Albert Zomaya, and Minyi Guo, Lasagna: Accelerating Secure Deep Learning Inference in SGX-enabled Edge Cloud, ACM Symposium on Cloud Computing (ACM SoCC), November 1-4, 2021.
- C244. Qihua Zhou, Song Guo, Zhihao Qu, Jingcai Guo, Zhenda Xu, Jiewei Zhang, Tao Guo, Boyuan Luo, and Jingren Zhou, “Octo: INT8 Training with Loss-aware Compensation and Backward Quantization for Tiny On-device Learning” , USENIX Annual Technical Conference (USENIX ATC), July 14-16, 2021.
- C243. Yi Liu, Leijie Wu, Yufen Zhan, Song Guo, and Zicong Hong, “Incentive-Driven Long-term Optimization for Edge Learning by Hierarchical Reinforcement Mechanism” , IEEE International Conference on Parallel and Distributed Systems (ICDCS), Virtual, July 7-10, 2021.
- C242. Huawei Huang, Zhenyi Huang, Xiaowen Peng, Zibin Zheng, and Song Guo, “MVCom: Scheduling Most Valuable Committees for the Large-Scale Sharded Blockchain” , IEEE International Conference on Parallel and Distributed Systems (ICDCS), Virtual, July 7-10, 2021.
- C241. Xiang Yang, Qi Qi, Jingyu Wang, Song Guo, and Jianxin Liao, “Towards Efficient Inference: Adaptively Cooperate in Heterogeneous IoT Edge Cluster” , IEEE International Conference on Parallel and Distributed Systems (ICDCS), Virtual, July 7-10, 2021.
- C240. Qiuying Yang, Xuan Liu, and Song Guo, “No Wait, No Waste: A Novel and Efficient Coordination Algorithm for Multiple Readers in RFID Systems” , IEEE/ACM International Symposium on Quality of Service (IWQOS), June 25-28, 2021.
- C239. Jian Zheng, Huawei Huang, Canlin Li, Zibin Zheng, and Song Guo, “Revisiting Double-Spending Attacks on the Bitcoin Blockchain: New Findings” , IEEE/ACM International Symposium on Quality of Service (IWQOS), June 25-28, 2021.
- C238. Zicong Hong, Song Guo, Peng Li, and Wuhui Chen, “Pyramid: A Layered Sharding Blockchain System” , IEEE Conference on Computer Communications (INFOCOM), May 10-13, 2021.
- C237. 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 10-13, 2021.

- C236. 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 10-13, 2021.
- C235. Wei Yang Lim, Jer Shyuan Ng, Zehui Xiong, Dusit Niyato, Song Guo, Cyril Leung, and Chunyan Miao, “Dynamic Resource Allocation for Hierarchical Federated Learning” , IEEE International Conference on Mobility, Sensing and Networking (MSN), Tokyo, Japan, December 17-19, 2020.
- C234. 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 17-19, 2020. (Best Track Paper Award)
- C233. 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 10-13, 2020.
- C232. 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 7-11, 2020.
- C231. 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 7-11, 2020.
- C230. 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 7-11, 2020.
- C229. 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, November 18 - December 16, 2020.
- C228. 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 12-16, 2020.

- C227. 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 11-14, 2020.
- C226. 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 12-17, 2020.
- C225. 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, Canada, August 17-20, 2020. (Best Paper Award Runner Up)
- C224. 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 6-7, 2020.
- C223. 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 6-7, 2020.
- C222. 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 8-10, 2020.
- C221. 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 15-19, 2020.
- C220. 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 7-11, 2020.
- C219. 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 7-11, 2020.

- C218. 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 7-11, 2020.
- C217. 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 7-11, 2020.
- C216. 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 7-11, 2020.
- C215. Song Guo and Deze Zeng, ”Pedagogical Data Federation toward Education 4.0”, International Conference on Frontiers of Educational Technologies (ICFET), Tokyo, Japan, June 5-8, 2020.
- C214. 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 18-22, 2020.
- C213. 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 3-7, 2020.
- C212. Zhi-Jie Wang, Bin Wang, Chunjing Gan, Huazhong Liu, Dingyu Yang, Shiyong Qian and Song Guo, “A Solution for High Availability Memory Access”, International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP), Melbourne, Australia, December 9-11, 2019.
- C211. 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 9-13, 2019.
- C210. 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 9-13, 2019.
- C209. 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 9-13, 2019.

- C208. 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 9-13, 2019.
- C207. 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 9-13, 2019.
- C206. 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 4-6, 2019.
- C205. 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 5-8, 2019.
- C204. 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 8-12, 2019.
- C203. 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 7-9, 2019.
- C202. 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 7-9, 2019.
- C201. 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 7-9, 2019.
- C200. 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 7-9, 2019.
- C199. 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 7-9, 2019.

- C198. 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 10-13, 2019.
- C197. 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 20-24, 2019.
- C196. Haipeng Yao, Huiwen Liu, Peiyang 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 20-24, 2019.
- C195. 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 12-17, 2019.
- C194. 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 12-17, 2019.
- C193. 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 18-20, 2019.
- C192. 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 18-20, 2019.
- C191. 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 18-20, 2019.
- C190. 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 11-13, 2018.
- C189. 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 9-13, 2018.

- C188. 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 9-13, 2018.
- C187. 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 8-12, 2018.
- C186. 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 8-12, 2018.
- C185. 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 13-16, 2018.
- C184. 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 11-13, 2018.
- C183. 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 21-25, 2018.
- C182. 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 20-24, 2018.
- C181. 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 20-24, 2018.
- C180. 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 20-24, 2018.

- C179. 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 20-24, 2018.
- C178. 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 20-24, 2018.
- C177. 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 19-21, 2018. (Best Student Paper Award)
- C176. 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 4-8, 2017.
- C175. Baojun Zhou, Jie Li, Song Guo, Jinsong Wu, Yongqiang Hu and Lihua Zhu, “Online Internet Traffic Measurement and Monitoring Using Spark Streaming” , IEEE Global Telecommunications Conference (Globecom), Singapore, December 4-8, 2017.
- C174. Lei Wang, Chunxiao Jiang, Linling Kuang, Sheng Wu, and Song Guo, “TDRSS Scheduling Algorithm for Non-uniform Time-Space Distributed Missions” , IEEE Global Telecommunications Conference (Globecom), Singapore, December 4-8, 2017.
- C173. 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 6-10, 2017.
- C172. 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, Toronto, Canada, September 24-27, 2017.
- C171. 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, Toronto, Canada, September 24-27, 2017.

- C170. 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 5-8, 2017.
- C169. 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 5-8, 2017.
- C168. 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 5-8, 2017.
- C167. 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 21-25, 2017.
- C166. 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 21-25, 2017.
- C165. 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 21-25, 2017.
- C164. 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 21-25, 2017.
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- BC10. 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.
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- E31. Kuljeet Kaur, Song Guo, Min Chen, and Danda B. Rawat, “Guest Editorial Special Section on Transfer Learning for 5G-Aided Industrial Internet of Things” , IEEE Transactions on Industrial Informatics, vol. 17, no. 10, October 2021, pp. 7070-7074, DOI: 10.1109/TII.2021.3071310.
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- E28. Song Guo and Baoliu Ye, “Editorial: 5G Wireless Communication Systems and Advanced Image Processing” , Mobile Networks and Applications.
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- E25. 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.

- E24. Weizhi Meng, Song Guo, and Zhiyuan Tan, “Security and Privacy for Smart Cities: Challenges and Opportunities” , Elsevier Computers & Electrical Engineering, to appear.
- E23. 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.
- E22. 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>
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- E6. 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.
- E5. Nei Kato, Song Guo, and Vojislav Mistic, “Emerging Mobile and Ubiquitous Systems - Part II” , IEEE Transactions on Emerging Topics in Computing, vol. 3, no. 3, September 2015, pp. 305-306.
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## Patents

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P11. Song Guo, Haozhao Wang, and Yufeng Zhan, “A gradient transmission method, gradient transmission device and parameter server” , No. 201911268718.8, (一种梯度传输方法, 梯度传输装置及参数服务器).

P10. Song Guo, Jingcai Guo, and Yufeng Zhan, “Image super-resolution method, image super-resolution device and terminal device” , No. 201911268720.5, (一种图像超分辨率方法、图像超分辨率装置及终端设备).

P9. Song Guo, Qihua Zhou, and Yufeng Zhan, “Distributed deep learning method, device, parameter server and working node” , No. 201911352575.9, (分布式深度学习方法、装置、参数服务器及工作节点).

P8. Song Guo, Haozhao Wang, and Yufeng Zhan, “Distributed machine learning communication optimization method, device, server and terminal device” , No. 201911421789.7, (分布式机器学习通信优化方法、装置、服务器及终端设备).

P7. Song Guo, Shiheng Ma, and Yufeng Zhan, “A kind of traffic flow distribution prediction method, prediction device and terminal equipment” , No. 202010037037.7, (一种交通流量分布预测方法、预测装置及终端设备).

P6. Song Guo, Xin Xie, and Yufeng Zhan, “RFID tag identification method, reader, target tag and computer medium” , No. 202010424672.0, (RFID 标签识别方法, 阅读器, 目标标签及计算机介质).

P5. Song Guo and Yufeng Zhan, “Method and medium for allocating computing resources” , No. 202010123424.2, (一种计算资源的分配方法及介质).

P4. Song Guo, Haozhao Wang, and Yufeng Zhan, “A distributed machine learning method, device, terminal device and storage medium” , No. 202011016938.4, (一种分布式机器学习方法、装置、终端设备及存储介质).

- P3. Song Guo, Haozhao Wang, and Yufeng Zhan, “A distributed deep learning method, device, terminal device and storage medium” , No. 202011018776.8, (一种分布式深度学习方法、装置、终端设备及存储介质).
- P2. Song Guo, Zicong Hong, and Xin Xie, “A method and system for submitting cross-shard transactions under a sharded blockchain” , No. 202110063950.9, (一种提交分片型区块链下跨片事务的方法及系统).
- P1. Song Guo, Feijie Wu, and Haozhao Wang, “A Federated Learning Approach Based on Machine Heterogeneity” , No. 202110279647.2, (一种基于机器异构性的联邦学习方法).

## PROFESSIONAL SOCIETY MEMBERSHIPS

- Fellow, the Canadian Academy of Engineering (CAE)
- Fellow, the Institute of Electrical and Electronic Engineers (IEEE)
- Distinguished Member, the Association for Computing Machinery (ACM)
- Member, the American Association for the Advancement of Science (AAAS)
- Fellow, Asia-Pacific Artificial Intelligence Association (AAIA)
- Fellow, European Alliance for Innovation (EAI)
- Senior Member, China Computer Federation (CCF)

## PROFESSIONAL SERVICE ACTIVITIES

### Membership in Committees

- Member of Fellow Evaluation Committee, IEEE Computer Society, 2020-now
- Steering Committee Member, IEEE Transactions on Cloud Computing, 2022-now
- Co-Chair of Ad Hoc Committee on New Topic Areas, Publications Board, IEEE Computer Society, 2022-now
- Member of Publications Board, IEEE Computer Society, 2020-now
- Member of Transactions Operations Committee, IEEE Computer Society, 2020-now
- Chair of IEEE COMSOC Technical Committee on Satellite and Space Communications (TCSSC), 2020-now
- Steering Committee Member, IEEE Transactions on Emerging Topics in Computing, 2019-now
- Member of IEEE Transactions on Cloud Computing EIC Search Committee, IEEE Computer Society, 2019

- Member of IEEE Transactions on Big Data EIC Search Committee, IEEE Computer Society, 2019
- Chair of IEEE COMSOC Special Interest Group (SIG) on Green Computing and Data Processing, 2017-now
- Member of Board of Governor, IEEE Communications Society, 2018-2019
- Director of Membership Services, IEEE Communications Society, 2018-2019
- Member of Marketing Standing Committee, IEEE Communications Society, 2018-2021
- Vice Chair of IEEE COMSOC Technical Committee on Green Communications and Computing (TCGCC), 2017-2019
- Secretary of IEEE COMSOC Technical Committee on Big Data (TCBD), 2015-2022
- Member of Education Committee, IEEE Blockchain Initiative, 2018-2019

### **Service for Review Panels**

- Engineering Panel Member, RGC (Research Grants Council), Hong Kong, 2017-2023
- Reviewer, NSFC (National Natural Science Foundation of China), 2021
- Member of China National Science and Technology Experts, 2018-now
- Reviewer, Grants & Fellowships, Fund for Scientific Research - FNRS, Belgium, 2019-2020
- Reviewer, Vici Grant, Dutch Research Council, Netherlands, 2020
- Reviewer, FNR CORE Programme, National Research Fund, Luxembourg, 2019-2020
- Reviewer, OPUS: General Grants, National Science Centre Poland (Poland), 2020
- Reviewer, Wellcome Research Fellowship, Wellcome Trust, United Kingdom, 2020
- Reviewer, Research Proposal at United Arab Emirates University (UAEU), 2020-2021

### **Journal Editorship**

- Editor-in-Chief, IEEE Open Journal of the Computer Society, 2020-now
- Advisory Board Member, Journal of Sensor and Actuator Networks, 2022-now
- 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-now
- Associate Editor, IEEE Transactions on Emerging Topics in Computing, 2014-2018
- Associate Editor, IEEE Transactions on Sustainable Computing, 2017-2021
- Associate Editor, IEEE Transactions on Green Communications and Networking, 2016-2021
- Editor, IEEE Internet of Things Journal, 2020-now
- Editor, IEEE Network Magazine, 2018-now

- 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-now
- Editor, Wireless Networks –Springer, 2013-now
- Editorial Board Member, Journal of Smart Cities and Society, IOS Press, 2022-now
- Associate Editor, Aerial and Space Networks, specialty section of Frontiers in Space Technologies, 2020-now
- International Members of the Editorial Committee, Application of Electronic Technique, National Computer System Engineering Research Institute of China, 2018-now
- Area Editor, EAI Transactions on Industrial Networks and Intelligent Systems, 2014-2020
- Area Editor, EAI Transactions on Collaborative Computing, 2015-now
- Area Editor, International Journal of Communication Networks and Information Security, 2012-now
- Editor, International Journal of Parallel, Emergent and Distributed Systems, 2013-now
- 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

## Conference Chairs

### 2022

- *International Liaison Chair*: Chinese Conference on Pattern Recognition and Computer Vision (PRCV), Shenzhen, China, October 14-17, 2022.
- *Program Chair* : International Conference on Artificial Intelligence, Automation and Algorithms (AI2A), Hangzhou, China, July 22-24, 2022.
- *General Chair*: IEEE Conference on Dependable and Secure Computing (IEEE DSC), Edinburgh, UK + Virtual, June 22-24, 2022.
- *Program Chair*: International Conference on Intelligent Environments (IE), Biarritz, France,

June 20-23, 2022.

## 2021

- *General Chair*: EAI International Conference on Tools for Design, Implementation and Verification of Emerging Information Technologies (EAI TRIDENTCOM), Melbourne, Australia (online), November 24, 2021.
- *General Chair*: IEEE International Conference on Space-Air-Ground Computing (IEEE SAGC), Huizhou, Guangdong, China, October 23-25, 2021.
- *Honorary Chair*: International Conference on Blockchain and Trustworthy Systems (BlockSys), China, August 5-6, 2021.

## 2020

- *General Chair*: IEEE Computing, Communications and IoT Applications (ComComAp), Beijing, China, December 20-22, 2020.
- *Program Chair*: IEEE International Conference on Parallel and Distributed Systems (ICPADS), Hong Kong, China, December 2-4, 2020.
- *General Chair*: International Conference on Control, Robotics and Intelligent System (CCRIS), Xiamen, China, October 27-29, 2020.
- *General Chair*: International Conference on Visual Computing and Multimedia (CVCM), Xiamen, China, October 27-29, 2020.
- *General Chair*: IEEE International Conference on Cloud Computing (CLOUD), Beijing, China, October 18-24, 2020.
- *Program Chair*: IEEE/CIC International Conference on Communications in China (ICCC), Chongqing, China, August 9-11, 2020.
- *Program Chair*: IEEE International Conference on Fog Computing (ICFC), Sydney, Australia, April 21-24, 2020.
- *Symposium Chair*: International Conference on Computing, Networking and Communications (IEEE ICNC), Big Island, Hawaii, USA, February 17-20, 2020.

## 2019

- *General Chair*: International Conference on Data Science and Information Technology (DSIT), Seoul Republic of Korea, July 19-21, 2019.
- *General Chair*: IEEE International Conference on Cloud Engineering (IC2E), Czech Republic, June 24-27, 2019.
- *Workshop Chair*: IEEE Conference on Computer Communications (INFOCOM), Paris, France, April 29 - May 2, 2019.

- *General Chair*: International Conference on Advances in Computer Technology, Information Science and Communications (CTISC), Xiamen, China, March 15-17, 2019.

## 2018

- *Program Chair*: International Conference on 5G for Ubiquitous Connectivity (5GU), Nanjing, China, December 4-5, 2018.
- *Program Chair*: IEEE International Symposium on Smart City and Informatization (iSCI), Guangzhou, China, October 8-12, 2018.
- *General Chair*: International Conference on Data Science and Information Technology (DSIT), Singapore, July 20-22, 2018.
- *Symposium Co-Chair*: IEEE International Conference on Communications (ICC), Kansas, USA, May 20-24, 2018.
- *Workshop Chair* : IEEE Conference on Computer Communications (INFOCOM), Honolulu, Hawaii, USA, April 15-19, 2018.
- *Symposium Co-Chair*: International Conference on Computing, Networking and Communications (IEEE ICNC), Maui, Hawaii, USA, March 5-8, 2018.

## 2017

- *Symposium Co-Chair*: IEEE Global Communications Conference (IEEE GlobeCom), Singapore, December 4-8, 2017.
- *Workshop Chair*: IEEE International Conference on Mobile Ad-Hoc and Smart Systems (IEEE MASS), Orlando, FL, USA, October 22-25, 2017.
- *Symposium Co-Chair*: International Conference on Wireless Communications and Signal Processing (WCSP), Nanjing, Jiangsu, China, October 11-13, 2017.
- *Poster Chair*: International Symposium on Reliable Distributed Systems (IEEE SRDS), Hong Kong, Hong Kong, September 26-29, 2017.
- *General Chair*: IEEE Cyber Science and Technology Congress (IEEE CyberSciTech), Orlando, FL, USA, August 12-22, 2017.
- *General Chair*: International Conference on Big Data Science and Engineering (IEEE Big-DataSE), Sydney, Australia, August 1-4, 2017.
- *Program Chair*: IEEE International Symposium on Future Cyber Security Technologies (IEEE FCST), Exeter, United Kingdom, June 21-23, 2017.

## 2016

- *Program Chair*: IEEE International Conference on High Performance Computing and Communications (IEEE HPCC), Sydney, Australia, December 12-14, 2016.

- *General Chair*: IEEE International Symposium on Future Cyber Security Technologies (IEEE FCST), Nagasaki, Japan, November 11-13, 2016.
- *Track Chair*: P2P, Parallel, Grid, Cloud and Internet Computing (3PGCIC), Soonchunhyang University, Asan, Korea, November 5-7, 2016.
- *Workshop Chair*: IEEE International Conference on Wireless and Mobile Computing, Networking And Communications (IEEE WiMob), October 17-19, 2016.
- *General Chair*: IEEE International Workshop on Big Data Analytics of Cyber-Physical Systems (BIGDATACPS), Nagasaki, Japan, October 15-17, 2016.
- *Symposium Chair*: IEEE/CIC International Conference on Communications in China (IEEE ICC), Chengdu Tibet Hotel, China, October 14-17, 2016.
- *Workshop Chair*: International Conference on Advances in Computing, Communications and Informatics (ICACCI), Jaipur, India, September 21-24, 2016.
- *Symposium Chair*: International Conference on Advances in Computing, Communications and Informatics (ICACCI), Jaipur, India, September 21-24, 2016.
- *General Chair*: International Workshop on Data Science and Engineering (IEEE DSE, in conjunction with ICPP), Philadelphia, PA, USA, August 16-19, 2016.
- *Program Chair*: International Conference on Big Data Intelligence and Computing (IEEE DataCom), Auckland, New Zealand, August 8-12, 2016.
- *General Chair*: EAI International Conference on Tools for Design, Implementation and Verification of Emerging Information Technologies (EAI TridentCom), Hangzhou, China, June 13-15, 2016.
- *Symposium Co-Chair*: IEEE International Conference on Communications (IEEE ICC), Kuala Lumpur, Malaysia, May 23-27, 2016.
- *Track Co-Chair*: IEEE Conference on Vehicular Technology (IEEE VTC), Hilton Nanjing Hotel, Nanjing, China, May 15-18, 2016.
- *General Chair*: International Conference on Information Technologies in Education and Learning (ICITEL), April 2016.
- *Program Chair*: International Workshop on Big Data Sciences, Technologies, and Applications (IEEE BDSTA, in conjunction with INFOCOM), San Francisco, CA, USA, April 10-14, 2016.
- *Symposium Chair*: International Conference on Computing, Networking and Communications (IEEE ICNC), Kauai, HI, USA, February 15-18, 2016.

## 2015

- *Symposium Co-Chair*: IEEE Global Communications Conference (IEEE GlobeCom), San

Diego, CA, USA, December 6-10, 2015.

- *General Chair*: EAI International Conference on Collaborative Computing: Networking, Applications and Worksharing (EAI CollaborateCom), Wuhan, China, November 10-11, 2015.
- *Symposium Co-Chair*: IEEE Region 10 Symposium (IEEE TENSYP), Ahmedabad, India, May 13-15, 2015.
- *Track Chair/Co-Chair*: International Conference on Big Data Computing Service and Applications (IEEE BigDataService), Redwood City, CA, USA, March 30 - April 2, 2015.
- *Publicity Chair*: IEEE Wireless Communications and Networking Conference (IEEE WCNC), New Orleans, LA, March 9-12, 2015.
- *General Chair*: EAI International Conference on Industrial Networks and Intelligent Systems (EAI INISCOM), Tokyo, Japan, March 2-4, 2015.

## 2014

- *Program Chair*: IEEE International Workshop on Cloud-integrated Cyber Physical Systems (IEEE Cloud-CPS), Singapore, December 15-18, 2014.
- *General Chair*: IEEE International Symposium on Networked Embedded Systems for Internet of Things (IEEE NEST), Aizu-Wakamatsu, Japan, September 23-25, 2014.
- *Symposium Chair*: International Conference on Communications and Networking in China (ChinaCom), Maoming, China, August 14-16, 2014.
- *Program Chair*: IEEE PSATS, International Conference on Ad Hoc Networks and Wireless (IEEE AdHocNow), Benidorm, Spain, June 22-27, 2014.

## 2013

- *Program Chair*: International Conference on Mobility, Sensing and Networking (IEEE MSN), Dalian, China, December 11-13, 2013.
- *General Chair*: International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services (EAI MobiQuitous), Tokyo, Japan, December 2-4, 2013.
- *Publication Chair*: International Symposium on Embedded Multicore/Many-core Systems-on-Chip (IEEE MCSoc), Tokyo, Japan, September 26-28, 2013.
- *General Chair*: IEEE Workshop on Networked Embedded Systems for Internet of Things (NEST), Tokyo, Japan, September 26-28, 2013.
- *Program Chair*: International Conference on Mobile, Ubiquitous, and Intelligent Computing (MUSIC), Gwangju, Korea, September 4-6, 2013.

## 2012

- *Publication Chair*: International Symposium on Embedded Multicore/Many-core Systems-on-



Chip (IEEE MCSoc), Aizu-Wakamatsu, Fukushima, Japan Japan, September 20-22, 2012.

- *General Chair*: IEEE Workshop on Networked Embedded Systems for Internet of Things (NEST), Aizu-Wakamatsu, Fukushima, Japan Japan, September 20-22, 2012.
- *Program Vice-Chair*: International Conference on Advanced Information Networking and Applications (IEEE AINA), Fukuoka-shi, Japan, March 26-29, 2012.

#### 2011

- *Publicity Chair*: International Conference on Adaptive Science & Technology (IEEE iCAST), Abuja, Nigeria, November 24-26, 2011.
- *Program Co-Chair*: IEEE/IFIP International Conference on Embedded and Ubiquitous Computing (EUC), Melbourne, Victoria Australia, October 24-26, 2011.
- *Program Chair*: International Workshop on Localized Algorithms and Protocols for Wireless Sensor Networks (LOCALGOS), Barcelona, Spain, June 29, 2011.

#### 2010

- *Program Co-Chair*: The International Conference on Parallel and Distributed Computing, Applications and Technologies (PDCAT), Wuhan, China, December 8-11, 2010.
- *Publicity Co-Chair*: The International Conference on Embedded Software and Systems (IEEE ICESSE), Bradford, UK, June 29 - July 1, 2010.

#### 2009

- *Program Co-Chair*: IEEE International Symposium on Future Cyber Security Technologies (IEEE FCST), Granada, Spain, October 22-25, 2009.

#### 2008

- *General Chair*: International Workshop on Ubiquitous Wireless Multihop Networking (IEEE UWWMN), Pudong, Shanghai, China, December 17-20, 2008.
- *International Liaison Co-Chair*: International Conference for Young Computer Scientist (IEEE ICYCS), Zhang Jia Jie, China, November 18-21, 2008,
- *General Chair*: IEEE International Conference on Mobile Ad-Hoc and Smart Systems (IEEE MASSN), Atlanta, Georgia, USA, September 29 - October 2, 2008.

### Membership in Technical Program Committees

#### 2023

- IEEE International Conference on Computer Communications (INFOCOM), Tokyo, Japan, April 25-27, 2023.

#### 2022

- The 17th European Conference on Computer Vision (ECCV) , Tel-Aviv, Israel, October 23-27, 2022.
- The 39th International Conference on Machine Learning (ICML), Baltimore, Maryland USA, July 17-23, 2022.
- 42nd IEEE International Conference on Distributed Computing Systems (ICDCS), Bologna, Italy, July 10-13, 2022.
- IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), New Orleans, United State, June 21-24, 2022.
- IEEE International Conference on Computer Communications (INFOCOM), Virtual Conference, May 2-5, 2022.
- The 20th International Conference on Pervasive Computing and Communications (PerCom), Pisa, Italy, March 21-25, 2022.
- The Thirty-Sixth AAAI Conference on Artificial Intelligence (AAAI), Virtual, February 22 - March 1, 2022.

## **2021**

- IEEE International Conference on Computer Communications (INFOCOM), Virtual Conference, May 10-13, 2021.
- The Thirty-Fifth AAAI Conference on Artificial Intelligence (AAAI), Virtually, February 2-9, 2021.

## **2020**

- The 2020 IEEE Global Communications Conference (IEEE GLOBECOM), Taipei, Taiwan, December 7-11, 2020.
- IEEE International Conference on Computer Communications (INFOCOM), Virtual Conference, July 6-9, 2020.
- International Conference on Computers Communications and Control (ICCCC), Oradea, Romania, May 11-15, 2020.

## **2019**

- IEEE International Conference on Cloud and Big Data Computing (CBDCom), Fukuoka, Japan, August 5-8, 2019.
- IEEE International Conference on Multimedia and Expo (ICME), Shanghai, China, July 8-12, 2019.
- IEEE International Conference on Distributed Computing Systems (ICDCS), Dallas, Texas, USA, July 7-9, 2019.

- IEEE International Conference on Communications (ICC), Shanghai, China, May 20-24, 2019.
- International Workshop on Cloud/Edge Computing in Robotic Systems (CCR), collocated with the 2019 IEEE International Conference on Service-Oriented System Engineering (SOSE), San Francisco, USA, April 4-9, 2019.

## 2018

- Annual IEEE International Conference on Wireless for Space and Extreme Environments (WISEE), Huntsville, AL, USA, December 11-13, 2018.
- IEEE Global Communications Conference (Globecom), Abu Dhabi, UAE, December 9-13, 2018.
- Advanced Satellite Multimedia Systems Conference and the Signal Processing for Space Communications Workshop (ASMS/SPSC), Berlin, Germany, September 10-12, 2018.
- The Fourth IEEE International Conference on Big Data Intelligence and Computing (Data-Com), Athens, Greece, August 12-15, 2018.
- The 14th International Wireless Communications and Mobile Computing Conference (IWCMC), Raphael Resort & Marina, Limassol, Cyprus, June 25-29, 2018.
- IEEE International Conference on Computer Communications (INFOCOM), Honolulu, HI, USA, April 15-19, 2018.

## 2017

- Asia-Pacific Conference on Communications, (APCC), Perth, Australia, December 11-13, 2017.
- International Conference on Computer Communication and Networks (ICCCN), Vancouver, Canada, July 31 - August 3, 2017.
- International Symposium on Performance Evaluation of Computer and Telecommunication Systems (SPECTS), Seattle, WA, USA, July 9-12, 2017.
- IEEE International Conference on Communications (ICC), Paris, France, May 21-25, 2017.
- IEEE International Conference on Computer Communications (INFOCOM), Atlanta, GA, USA, May 1-4, 2017.
- IEEE Wireless Communications and Networking Conference (WCNC), San Francisco, CA, March 19-22, 2017.

## 2016

- IEEE Global Communications Conference (IEEE GLOBECOM), Washington, DC USA, December 4-8, 2016.
- International Teletraffic Congress (ITC), Würzburg, Germany, September 12-16, 2016.
- IEEE International Conference on Future Internet of Things and Cloud (FiCloud), Vienna,

Austria, August 22-24, 2016.

- International Conference on Wireless Algorithms, Systems, and Applications (WASA), Bozeman, Montana, USA, August 8-10, 2016.
- International Conference on Computer Communication and Networks (ICCCN), Waikoloa, HI, USA, August 1-4, 2016.
- IEEE International Conference on Distributed Computing Systems (ICDCS), Nara, Japan, June 27-30, 2016.
- The International Workshop of Software-Defined Data Communications and Storage (SDDCS), Nara Japan, June 27, 2016.
- IEEE International Conference on Communications (ICC), Kuala Lumpur, Malaysia, May 23-27, 2016.
- IEEE Canadian Conference on Electrical and Computer Engineering (CCECE), Vancouver, Canada, May 15-18, 2016.
- IEEE International Conference on Computer Communications (INFOCOM), San Francisco, CA, USA, April 10-15, 2016.
- The fourth international workshop on security and privacy in big data (BigSecurity), San Francisco, CA, USA, April 10-14, 2016.
- IEEE Wireless Communications and Networking Conference (WCNC), Doha, Qatar, April 3-6, 2016.
- IEEE Second International Conference on Big Data Computing Service and Applications (BigDataService), Oxford, United Kingdom, March 29 - April 1, 2016.
- IEEE International Conference on Pervasive Computing and Communications (PerCom), Sydney, Australia, March 14-19, 2016.
- International Conference on Computing, Networking and Communications (ICNC), Kauai, Hawaii, USA, February 15-18, 2016.

## 2015

- IEEE International Conference on Computing, Management and Telecommunications (ComManTel), Da Nang, Vietnam, December 28-30, 2015.
- IEEE International Conference on Parallel and Distributed Systems (ICPADS), Melbourne, Australia, December 14-17, 2015.
- International Telecommunication Networks and Applications Conference (ITNAC), Sydney, Australia, November 18-20, 2015.
- Asia-Pacific Conference on Communications (APCC), Kyoto, Japan, October 14-16, 2015.

- International Conference on Future Internet of Things and Cloud (FiCloud), Rome, Italy, August 24-26, 2015.
- IEEE International Conference on Trust, Security and Privacy in Computing and Communications (TrustCom), Helsinki, Finland, August 20-22, 2015.
- International Conference on Computer Communication and Networks (ICCCN), Las Vegas, NV, USA, August 3-6, 2015.
- IEEE International Conference on Distributed Computing Systems (ICDCS), Columbus, OH, USA, June 29 - July 2, 2015.
- Proceedings of the Sixth International Conference on Computational Creativity (ICCC), Park City, Utah, USA, June 29 - July 2, 2015.
- The IEEE International Conference on Communications (ICC), London, UK, June 8-12, 2015.
- IEEE Conference on Computer Communications (INFOCOM), Kowloon, Hong Kong, April 26 - May 1, 2015.
- The International Workshop of Software-Defined Data Communications and Storage (SDDCS), Hong Kong, China, April 27, 2015.
- International Workshop on Security and Privacy in Big Data (BigSecurity), Hong Kong, China, April 27, 2015.
- IEEE Wireless Communications and Networking Conference (WCNC), New Orleans, LA, USA, March 9-12, 2015.

## 2014

- Annual IEEE International Conference on Computer Communications (INFOCOM), Toronto, Canada, April 27 - May 2, 2014.
- IEEE Global Communications Conference (GLOBECOM), Austin, TX, USA, December 8-12, 2014.
- Australasian Telecommunication Networks and Applications Conference (ATNAC), Melbourne, Australia, November 26-28, 2014.
- IEEE International Symposium on Embedded Multicore/Manycore SoCs (MCSoc), Aizu-Wakamatsu, Japan, September 23-25, 2014.
- Asia Joint Conference on Information Security (AsiaJCIS), Wuhan, China, September 3-5, 2014.
- IEEE International Conference on High Performance Computing and Communications (PCC), Paris, France, August 20-22, 2014.
- International Workshop on Privacy, Security and Trust in Mobile and Wireless Systems (Mo-

biPST), Shanghai, China, August 7, 2014.

- International Workshop on Network Forensics, Security and Privacy (NFSP), in conjunction with ICDCS, Madrid, Spain, July 3, 2014.
- International Conference on Green, Pervasive and Cloud Computing (GPC), Wuhan, China, May 26-28, 2014.
- The Second International Workshop on Security and Privacy in Big Data (BigSecurity), in conjunction with IEEE INFOCOM, Toronto, Canada, April 28, 2014.
- IEEE Wireless Communications and Networking Conference (WCNC), Istanbul, Turkey, April 6-9, 2014.

## **2013**

- IEEE Global Communications Conference (GLOBECOM), Atlanta, GA, USA, December 9-13, 2013.
- IEEE Annual International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC), London, United Kingdom, September 8-11, 2013.
- International Conference on Advances in Computing, Communications and Informatics (ICACCI), Mysore, India, August 22-25, 2013.
- International Workshop on Network Forensics, Security and Privacy (NFSP), Philadelphia, USA, July 8-11, 2013.
- The International Wireless Communications and Mobile Computing Conference (IWCMC), Cagliari, Sardinia, Italy, July 1-5, 2013.
- The 3rd IEEE International Workshop on Smart Communication Protocols and Algorithms (SCPA), Budapest, Hungary, June 9-13, 2013.
- IEEE International Conference on Computer Communications (INFOCOM), Turin, Italy, April 14-19, 2013.
- IEEE Wireless Communications and Networking Conference (WCNC), Shanghai, China, April 7-10, 2013.
- Communications-Networking and Internet Technologies (CNIT), Hong Kong, April 1-4, 2013.
- International Conference on Computing, Networking and Communications (ICNC), San Diego, CA, January 28-31, 2013.

## **2012**

- International Conference on Mobile Ad-hoc and Sensor Networks (MSN), Chengdu, Sichuan, China, December 14-16, 2012.
- International Conference on Connected Vehicles and Expo (ICCVE), Beijing, China, December

12-16, 2012.

- International Conference on Wireless Mobile Communication & Healthcare (Mobihealth), Paris, France, November 21-23, 2012.
- IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS), Las Vegas, Nevada, USA, October 8-11, 2012.
- IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Sydney, Australia, September 9-12, 2012.
- International Wireless Communications and Mobile Computing Conference, (IWCMC), Limassol, Cyprus, August 27-31, 2012.
- IEEE International Conference on Communications in China (ICCC), Beijing, China, August 15-18, 2012.
- The 6th International Conference on Multimedia and Ubiquitous Engineering (MUE), Madrid, Spain, July 11, 2012.
- The 3rd FTRA International Conference on Mobile, Ubiquitous, and Intelligent Computing (MUSIC), Vancouver, Canada, June 26-28, 2012.
- International Workshop on Network Forensics, Security and Privacy (NFSP), Macau, China, June 18-21, 2012.
- IEEE Vehicular Technology Conference (VTC Spring), Yokohama, Japan, May 6-9, 2012.
- IEEE Wireless Communications and Networking Conference (WCNC), Paris, France, April 1-4, 2012.
- The Annual IEEE International Conference on Computer Communications (INFOCOM), Orlando, Florida, USA, March 25-30, 2012.

## **2011**

- International Workshop on Performance Evaluation of Wireless Networks (PEWiN), Beijing, China, December 16, 2011.
- International Conference on Information Systems (ICIS), Shanghai, China, December 4-7, 2011.
- IEEE/IFIP EUC Workshop on Data Management, Security and Privacy in Sensor Networks and RFID (DSPSR), Melbourne, Australia, October 24-26, 2011.
- Research in Applied Computation Symposium (RACS), Miami, FL, USA, October 19-22, 2011.
- IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS), Valencia, Spain, October 17-21, 2011.
- Wireless Mobile Communication and Healthcare. Second International ICST Conference (Mo-

biHealth), Kos Island, Greece, October 5-7, 2011.

- IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Toronto, Canada, September 11-14, 2011.
- International Conference on Ubiquitous Intelligence and Computing (UIC), Banff, Canada, September 1-4, 2011.
- International Conference on Advances in Computing and Communications (ACC), Kochi, India, July 22-24, 2011.
- International Workshop on Multimedia Streaming (MultiStreams), Kochi, India, July 22-24, 2011.
- International Wireless Communications and Mobile Computing Conference (IWCMC), Istanbul, Turkey, July 4-8, 2011.
- International Conference on Complex, Intelligent and Software Intensive Systems (CISIS), Korean Bible University, Seoul, Korea, June 30 - July 2, 2011.
- International Conference on Distributed Computing in Sensor Systems and Workshops (DCOSS), Barcelona, June 27-29, 2011.
- International Conference on Performance, Safety and Robustness in Complex Systems and Applications (PESARO), Budapest, Hungary, April 17-22, 2011.
- IEEE Wireless Communications and Networking Conference (WCNC), Cancun, Mexico, March 28-31, 2011.
- International Conference on Pervasive and Embedded Computing and Communication Systems (PECCS), Algarve, Portugal, March 5-7, 2011.

## 2010

- International Conference on Ubiquitous Information Technologies and Applications (CUTE), Sanya, Hainan, China, December 16-18, 2010.
- IEEE International Workshop on Wireless Network Algorithm and Theory (WiNA), Hong Kong, China, December 13, 2010.
- Proceedings of the International Conference on Information Systems (ICIS), Saint Louis, Missouri, USA, December 12-15, 2010.
- IEEE/IFIP International Conference on Embedded and Ubiquitous Computing (EUC), Hong Kong, China, December 11-13, 2010.
- International Workshop on Peer-to-Peer Networking (P2PNet), Shanghai, China, December 7, 2010.
- International Symposium on Aware Computing (ISAC), Taiwan, November 1-4, 2010.



- International Conference on Ubiquitous Intelligence and Computing (UIC), Xi'an, China, October 26-29, 2010.
- IEEE Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), September 26-29, 2010.
- International Conference on Network-Based Information Systems (NbiS), Takayama, Japan, September 14-16, 2010.
- International Symposium on Embedded Multicore SoCs (MCSoc), San Diego, CA, USA, September 13-16, 2010.
- IEEE International Symposium on Trust, Security and Privacy for Pervasive Applications (TSP), Bradford, UK, Jun 29, 2010 - Jul 1, 2010.
- IEEE International Conference on Embedded Software and Systems (ICISS), Bradford, UK, June 29 - July 1, 2010.
- International Workshop on Localized Algorithms and Protocols for Wireless Sensor Networks (LOCALGOS), Santa Barbara, USA, June 23, 2010.
- International Workshop on Advances in Emerging Wireless Networks and Systems (AEWiNS), Busan, Korea, May 21-23, 2010.
- IEEE Wireless Communications and Networking Conference (WCNC), Sydney, Australia, April 18-21, 2010.
- International Conference on Information Systems, Technology and Management (ICISTM), Bangkok, Thailand, March 11-13, 2010.

## 2009

- International Conference on Ubiquitous Information Technologies & Applications (ICUT), Kyushu Sangyo University, Fukuoka, Japan, December 20-22, 2009.
- International Workshop on Performance Evaluation of Wireless Networks (PEWiN), Fujian, China, December 14-16, 2009.
- IEEE International Conference on Intelligent Computing and Intelligent Systems (ICIS), Shanghai, China, November 20-22, 2009.
- The Second IEEE International Workshop on Wireless Network Algorithm and Theory (WiNA), in conjunction with IEEE MASS 2009, Macau SAR, China, October 12, 2009.
- IEEE International Symposium on Trust, Security and Privacy for Pervasive Applications (TSP), Macau SAR, China, October 5-7, 2009.
- International Conference on Scalable Computing and Communications (ScalCom), Northwest Washington, US, September 25-27, 2009.

- International Symposium on Embedded Multicore/Many-core Systems-on-Chip (MCSoc), Vienna, Austria, September 22-25, 2009.
- IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Tokyo, Japan, September 13-16, 2009.
- Clustering Signature in Complex Social Networks; International Conference on Computational Science and Engineering (CSE), Vancouver, Canada, August 29-31, 2009.
- International Conference on Ubiquitous Intelligence and Computing (UIC), Brisbane, QLD, Australia, July 7-9, 2009.
- International Workshop on Localized Algorithms and Protocols for Wireless Sensor Networks (LOCALGOS), Marina Del Rey, US, June 10, 2009.
- ACIS International Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD), Daegu, Korea, May 27-29, 2009.
- The 4th International Workshop on Performance Analysis and Enhancement of Wireless Networks (PAEWN), in conjunction with IEEE AINA-2009, Bradford, UK, May 26-29, 2009.
- IEEE International Conference on Embedded Software and Systems (ICCESS), Hangzhou, Zhejiang, China, May 25-27, 2009.
- ACM International Workshop on Foundations of Wireless Ad Hoc and Sensor Networking and Computing (FOWANC), New Orleans, LA, USA, May 18, 2009.
- International Conference on Information Systems, Technology and Management (ICISTM), Ghaziabad, India, March 12-13, 2009.

## 2008

- IEEE/IFIP International Conference on Embedded and Ubiquitous Computing (EUC), Shanghai, China, December 17-20, 2008.
- International Symposium on Trust, Security and Privacy for Emerging Applications (TSP), Shanghai, China, December 17-20 2008.
- International ICST Workshop on MOdelling and DEsign of wireless mesh NETworks (MOD-ENETs), Athens, Greece, October 23, 2008.
- International Symposium on Embedded Multicore/Many-core Systems-on-Chip (MCSoc), Hanoi, Vietnam, September 12-14, 2008.
- IEEE International Conference on Communications and Networking in China (CHINACOM), Hangzhou, China, August 25-27, 2008.
- IEEE Wireless Communications & Networking Conference (WCNC), Las Vegas, Nevada, USA, March 31 - April 3, 2008.

- International Conference on Information Systems, Technology and Management (ICISTM), Dubai, UAE, March 3-4, 2008.

## 2007

- International Conference on Mobile Ad-hoc and Sensor Networks (MSN), Beijing, China, December 12-14, 2007.
- IEEE Global Telecommunications Conference (Globecom) Washington, DC, USA, November 26-30, 2007.
- IEEE Eighth ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing (SNPD), Qingdao, China, July 30 - August 1, 2007.

## UNIVERSITY SERVICE ACTIVITIES

- Associate Head, Department of Computing, Hong Kong Polytechnic University, 2019-2021
- Director of Edge Intelligence Lab, Department of Computing, Hong Kong Polytechnic University, 2016-present
- Member of Department Management Committee, Department of Computing, Hong Kong Polytechnic University, 2019-2021
- Member of Faculty Staffing Committee, Faculty of Engineering, Hong Kong Polytechnic University, 2019-2023
- Head of Networking and Mobile Computing Research Group, Department of Computing, Hong Kong Polytechnic University, 2019-present
- Dept Representative for Doctor of FinTech Programme (hosted by Faculty of Business), Department of Computing, Hong Kong Polytechnic University, 2020-present
- Member of DFinTech Programme Committee, Faculty of Business, Hong Kong Polytechnic University, 2020-present
- Seminar Coordinator, Department of Computing, Hong Kong Polytechnic University, 2020-2021
- HK PhD Fellowship Coordinator, Department of Computing, Hong Kong Polytechnic University, 2019-2021
- Member of Department Staffing Committee, Department of Computing, Hong Kong Polytechnic University, 2017-2019
- Member of Department Research Committee, Department of Computing, Hong Kong Polytechnic University, 2017-2021
- Chair of Department Research Committee, Department of Computing, Hong Kong Polytechnic

University, 2016-2017

- Member of Department Heads Group, Department of Computing, Hong Kong Polytechnic University, 2016-2017
- Member of Faculty Research Committee, Faculty of Engineering, Hong Kong Polytechnic University, 2016-2017
- Member of Department Management Committee, Department of Computing, Hong Kong Polytechnic University, 2016-2017
- Research Club Director of Challengers Program, Department of Computing, Hong Kong Polytechnic University, 2016-2017
- Leader, University Strategic Research Project on Internet-of-Things, University of Aizu, 2015-2016
- Member of Graduate School Academic Affairs Committee, University of Aizu, 2014-2016
- Member of Super Global University Program Committee, University of Aizu, 2014-2016
- Member of Graduate School Entrance Examination Committee, University of Aizu, 2012-2016
- Member of Working Group for Internationalization, University of Aizu, 2012-2015
- Director, WG of Faculty Colloquium on Collaborative Research Excellence, University of Aizu, 2012-2015
- Member of Health and Welfare Guidance Committee, University of Aizu, 2010-2012
- Representative of Joint Research Program with Olympus Future Creation Laboratory, 2009-2013
- Founder and Representative of Joint Lab, University of Aizu and Nanjing University, 2009-2016
- Coordinator, Partnership between University of Aizu and Temple University, 2015-2016
- Coordinator, Partnership between University of Aizu and Shanghai Jiao Tong University, 2009-2016
- Coordinator, Partnership between University of Aizu and Nanjing University, 2009-2016
- Coordinator, Partnership between University of Aizu and Huazhong University of Science and Technology with Double Degree Program, 2009-2016
- Coordinator, Partnership between University of Aizu and National Chi Nan University, 2009-2016
- Coordinator, Partnership between University of Aizu and Chaoyang University of Technology, 2009-2016
- Member of Graduate Studies Committee, University of Northern British Columbia, 2006-2007

## ADVISING

Post-doc Fellows: 15+

PhD Students: 30+

Master Students: 30+

Undergraduate Students: 50+

## TEACHING

<i>Semester</i>	<i>Course</i>	<i>Title</i>	<i>University</i>	<i>Level</i>
20-21	COMP5434	Big Data Computing	PolyU	Master
20-21	COMP6434	Big Data Analytics and Artificial Intelligence	PolyU	Doctoral
16-22	COMP4434	Big Data Analytics	PolyU	Senior
16-18	COMP2411	Database Systems	PolyU	Junior
17-18	COMP2121	E-Business	PolyU	Junior
08-16	F6	Operating Systems	UAizu	Senior
08-16	N5	Performance Evaluation	UAizu	Senior
09-10	SE6	Distributed Computing	UAizu	Senior
10-16	CAN03	Wireless and Mobile Networks	UAizu	Graduate
10-16	CAN04	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
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