Song Guo

PERSONAL INFORMATION

Citizenship Canadian

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	Ph.D.	Computer Science	2001–2005							
	M.E.	University of Ottawa, Canada Computer Engineering	1995–1998							
	B.E.	Beijing University of Posts and Telecommunications, China Computer Engineering Huazhong University of Science and Technology, China	1991–1995							
ΡI	PROFESSIONAL EXPERIENCE									
	The Hong	Kong University of Science and Technology								
	_	or, Department of Computer Science and Engineering	2023–present							
	The Hong	Kong Polytechnic University								
	•	or, Department of Computing	2016–2023 2019–2021							
	Associate Head (Research and Development), Department of Computing									
	Director, Po	olyU Edge Intelligence Lab	2016–2023							
	•	amic Medical Technology								
	$Co ext{-}founder,$	Chief Scientist	2021–present							
	Wuhan Ur	niversity								
	Changjiang	Chair Professor, School of Computer Science	2019–present							
	The Unive	ersity of Aizu								
	Full Profess	or, School of Computer Science and Engineering	2014 – 2016							
	Senior Asso	ciate Professor, School of Computer Science and Engineering	2011 – 2013							
	Associate P	rofessor, School of Computer Science and Engineering	2007–2011							
	University	of Northern British Columbia								
	Assistant Pa	rofessor, Department of Computer Science	2006–2007							
	University	of British Columbia								
	NSERC Pos	stdoctoral Fellow, Department of Electrical and Computer Engineering	2006-2006							
	Liska Bion	netry Inc.								
	${\it Co ext{-}founder},$	Chief Architect	2001-2006							

RESEARCH INTERESTS

Prof. Guo is the founding director of the Edge Intelligence Lab at The Hong Kong Polytechnic University (PEIL). His research interests are mainly in Edge AI, Big Data, Cloud Computing, Wireless Networking, and Distributed System. He published many papers in top venues with wide impact in these areas and was recognized as a Highly Cited Researcher (Clarivate Web of Science) for consecutive years. His impactful and pioneering work has been widely reported in public media like Sing Tao Daily (星岛日报), China Daily (中国日报), Xinhua News (新华社), Scientific Chinese (科学中国人), Daily Mail, Mail Online, Tech News, etc.

HONORS AND AWARDS

- Member of Academia Europaea, 2022
- 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 & 2022
- Outstanding Service Award, Satellite and Space Communications Technical Committee, IEEE Communications Society, 2022
- 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, 2020 & 2021
- Faculty Merit Award for Outstanding Achievement in Research and Scholarly Activities, The Hong Kong Polytechnic University, 2022 & 2020
- Faculty of Engineering Research Grant Achievement Award, The Hong Kong Polytechnic University,
 2022 & 2023
- 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
- Distinguished Lecturer, IEEE Communications Society, 2016-2017
- 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 (ICESS), 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

INNOVATION AND COMPETITION

- Asia International Innovation Invention Award (Gold Medal), AI Spine Correction and Rehabilitation Platform, Asia International Innovation Invention Exhibition (AsiaWorld-Expo), 2023.
- Gold Medal, Advanced Intelligent System for Radiation-free Scoliosis and Posture Evaluation, the 48th International Exhibition of Inventions Geneva (Geneva Inventions Expo), 2023.

- 2nd Runner-Up, Huawei Cloud Developer Competition APAC Final 2022 "Spark Infinity".
- 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.
- Silver Medal, Dr. Body: Posture Detection and Rehabilitation Tracking System, the 12th "Challenge Cup" of National College Student Entrepreneurship Plan Competition, as supervisor, 2020.
- 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.
- 2020 Hong Kong Social Enterprise Competition Intellectual Property Ambassador Award.
- 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.
- First Prize, ComSoc Student Competition 2016, as supervisor.

BEST PAPER AWARDS

- Best Demo Award, IEEE/CIC International Conference on Communications in China (ICCC), Dalian, China, August 10-12, 2023.
- 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.
- 21st Annual Best of Computing Notable Books and Articles in Computing of 2016, ACM Computing Reviews, 2017, for the paper "An efficient privacy-preserving ranked keyword search method", IEEE Transactions on Parallel and Distributed Systems, vol. 27, no. 4, April 2016, pp. 953-961.

- 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

- 61. RGC General Research Fund (GRF), "Neural-enhanced Edge Perception: Representation-aware Analytics on Collaborative Devices", 2024-2026, PI, 1,533,087 HKD.
- 60. RGC General Research Fund (GRF), "Elastic Multimodal learning over Internet of Vehicles", 2024-2026, Co-PI, 1,358,201 HKD.
- 59. RGC General Research Fund (GRF), "Empowering TinyML with Low-shot Learning for Edge AI Systems", 2024-2026, Co-PI, 898,284 HKD.
- 58. RGC Areas of Excellence Scheme (AoE), "6G: Wireless Access and Connectivity for an Intelligent and Sustainable World", 2023-2027, Co-PI, 87,304,000 HKD.
- 57. Postdoc Matching Fund Scheme Jie ZHANG, 2023-2025, PI, 547,622 HKD.
- 56. Postdoc Matching Fund Scheme Ning LI, 2023-2025, PI, 456,030 HKD.
- 55. RGC General Research Fund (GRF), "Editable Learning with Fast Adaptation over Evolutionary Edges", 2023-2025, PI, 1,145,729 HKD.
- 54. RGC General Research Fund (GRF), "A Novel Modelling Approach for Predicting Sewer Failure", 2023-2025, Co-I, 1,059,605 HKD.
- 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 edge computing platform for human-machine collaboration", 2021-2024, Co-PI, 34,000,000 RMB.
- 51. PolyU Postdoc Matching Fund Scheme Jinwen LIANG, 2022-2024, PI, 456,286 HKD.
- 50. PolyU Distinguished Postdoctoral Fellowship Scheme Jing LI, 2022-2025, PI, 1,288,513 HKD.
- 49. PolyU Postdoc Matching Fund Scheme Hao REN, 2022-2023, PI, 365,400 HKD.

- 48. 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.
- 47. PolyU Project of Strategic Importance, "Crowdsourced Mobile Video Analytics for Emerging Realtime Risk Management in Smart Cities", 2021-2022, PI, 2,000,000 HKD.
- 46. 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.
- 45. 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.
- 44. PolyU Intra-Faculty Interdisciplinary Project, "Exo-neuro-musculo-skeleton (ENMS) based on Corticomuscular Integrated Control and Cyber Physical Social System (CPSS) for Grouped Telerehabilitation of Wrist-Hand after Stroke", 2021-2022, Co-I, 400,000 HKD.
- 43. 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.
- 42. RGC General Research Fund (GRF), "Federated Learning with Non-IID Data over Resource-Constrained Mobile Edge Networks", 2021-2023, PI, 1,057,394 HKD.
- 41. Hong Kong Scholars Program, "Federated Learning over Resource-Constrained Mobile Edge Networks", 2021-2023, PI, 800,000 HKD.
- 40. 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.
- 39. 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.
- 38. PolyU Postdoctoral Fellowships Scheme, "Human Tracking with Embedded Sensors on Collaborative Multiple Smart Devices", 2020-2022, PI, 799,800 HKD.
- 37. Chinese National Engineering Research Centre (CNERC), "Data Analytics and Machine Learning Algorithms for Smart Transportation Systems", 2020-2021, PI, 500,000 HKD.
- 36. RGC General Research Fund (GRF), "Proactive and Cooperative Resource Allocation in Wide-scale Edges", 2020-2022, PI, 935,141 HKD.
- 35. 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.
- 34. Consultancy Project with Esquel Enterprises Limited, "Bitmap Conversion for Label Artwork Patterning", 2019-2020, PI, 156,000 HKD.
- 33. 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.
- 32. RGC Collaborative Research Fund (CRF), "Multi-stage Big Data Analytics for Complex Systems: Methodologies and Applications", 2019-2022, Co-PI, 3,661,193 HKD.
- 31. PolyU Postdoctoral Fellowships Scheme, "Highly-Efficient Data Dissemination in Mobile Edge Computing Enabled Internet of Vehicles", 2019-2021, PI, 771,000 HKD.
- 30. Collaborative Research with Huawei Technologies Co., Ltd., "Ethernet Transport Network Performance Simulation", 2018-2019, PI, 771,150HKD.

- 29. NSFC (National Natural Science Foundation of China), General Research, "Edge Intelligence Oriented Resource Management and Deployment Optimization", 2019-2022, PI, 640,000 RMB.
- 28. Collaborative Research with Guilin Medical Group, "MioTChain", 2018 –2019, PI, 1,000,270 HKD.
- 27. 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.
- 26. 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.
- 25. Shenzhen Basic Research Funding Scheme, "Task Scheduling of Multi-platform Computing Resources in Mobile Crowdsourcing Networks", 2018-2019, PI, 300,000 CNY.
- 24. 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.
- 23. 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.
- 22. 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.
- 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.
- 20. PolyU Internal Competitive Research Grant (CRG), "Optimized Request Admissions in NFV-Enabled Software-Defined Networks", 2017-2019, PI, 105,000 HKD.
- 19. PolyU Joint Supervision Scheme, "Bandwidth Guaranteed Virtual Network Function Placement on NUMA Machines", 2017-2018, PI, 154,500 HKD.
- 18. PolyU COMP Start-up Fund, "Self-adaptive Platform for Big Spatial-Temporal Data Analytics", 2016-2019, PI, 1,500,000 HKD.
- 17. 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.
- 16. 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.
- 15. 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.
- 14. JST SIP (Cross-ministerial Strategic Innovation Promotion Program) on Enhancement of Societal Resiliency against Natural Disasters, 2015 –2017, Co-I, 25,000,000 JPY.
- 13. 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.
- 12. Fukushima Revitalization Research Fund, "Development of a Resilient Information Management System Applicable under Network-isolated Environment", 2013 –2014, PI, 10,000,000 JPY.

- 11. 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.
- 10. A3 Foresight Program funded by JSPS (Japan), NSFC (China) and NRF (Korea), 2012 –2014, Co-I, 28,000,000 JPY.
- 9. NSFC (National Natural Science Foundation of China), General Research, "On Practical Network Coding Techniques for Wireless Networks", 2014-2016, Co-PI, 800,000 RMB.
- 8. 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.
- 7. Joint Research Fund of Olympus Corporation, "Context-Aware System Guaranteeing Quality of Service for a Wide Area", 2011-2013, PI, 10,000,000 JPY.
- 6. 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.
- 5. University of Aizu Competitive Research Fund, 2008-2015, PI, 10,000,000 JPY.
- 4. 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.
- 3. 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.
- 2. Joint Research Fund of Olympus Corporation, "New Models of Grid and Ubiquitous Computing for Image Processing", 2008-2010, PI, 10,000,000 JPY.
- 1. Professional Development Fund, University of Northern British Columbia, 2006, 2,000 CAD.

SCHOLARLY ADDRESSES

- 104. Keynote, IEEE International Conference on Data Science in Cyberspace, Hefei, China, August 18-20, 2023
- 103. Invited Talk, "CCF 走进高校"第 981 场, Wuhan University of Technology, July 30, 2023
- 102. Panel Talk, Discussion on Future Networks for Ubiquitous Intelligence, 2023 Canadian Academy of Engineering (CAE) Conference, Victoria, Canada, June 19 –21, 2023
- 101. Invited Talk, "ChatGPT 的进展及对香港创新发展的机遇和挑战-建立联邦人工智能网络基础设施赋能大湾区智慧社会的展望",中国联通与香港科技界共创「人工智能-智慧社会」高峰论坛, Hong Kong, March 10, 2023
- 100. Invited Talk, "边缘智能赋能智慧城市",「香港智能科技青少年万人科普计划」走进全港地区系列之港岛, Hong Kong, March 2, 2023
- 99. Invited Talk, ChatGPT: Challenges, Opportunities and Responses to AI in University Education, The Hong Kong Polytechnic University, February 16, 2023
- 98. Invited Talk, "生成式 AI 的价值与挑战", 2023 金融科技趋势展望, MIT Technology Review, January 11, 2023
- 97. Invited Talk, "会聊天的人工智能",「香港万人科普计划」院士讲科普活动, Hong Kong, January 7, 2023
- 96. Keynote, GBA International Artificial Intelligence and Robotics Summit 2022, Hong Kong and Shenzhen, December 20-21, 2022
- 95. Keynote, Ministry of Education International Industry-University-Research Cooperation Conference on Artificial Intelligence and Data Governance, Zhejiang, China, November 27, 2022

- 94. Keynote, 18th EAI International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (QSHINE), Chongqing, China, November 26-27, 2022
- 93. Keynote, International Workshop on Network Intelligent Computing, Central South University, Changsha, China, November 13, 2022
- 92. Keynote, Yueqi Forum, High-level Talents Sub-Forum in Computer Science Research Progress in Service Computing, China University of Mining and Technology, Xuzhou, China, November 10, 2022
- 91. Keynote, International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP), Copenhagen, Denmark, October 10-12, 2022
- 90. Panelist, Asia Pacific Digital Talent Summit, Huawei Connect 2022, Bangkok, Thailand, September 19, 2022
- 89. Keynote, 第六届未来网络发展大会, 网络智能与大数据论坛, Nanjing, August 2022
- 88. Keynote, 香港华为云 & 智慧科技论坛: 云与智慧科技共创香港, Hong Kong, August 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. Invited Talk, Frontier Academic Forum, Institute of Cryptography and Data Security, Beijing Institute of Technology, March 2022
- 82. Invited Talk, 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
- $73.\ \, \text{Invited Talk, International Symposium on Network Security and Intelligent Communication, Northwestern Polytechnical University , June 2021}$
- 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 (YOC-SEF) 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 Yatsen 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 (MOBIME-DIA 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
- 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
- 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
- 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

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- B12. Song Guo and Zhihao Qu, Edge Learning for Distributed Big Data Analytics: Theory, Algorithms, and System Design, Cambridge University, ISBN-13: 9781108832373, 2022.
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- 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,

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- 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.
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- J315. Shaoyong Guo, Yuanyuan Qi, Sujie Shao, Shuang Wu, Xuesong Qiu, Song; Guo, and Shaoyong Guo, "A Distributed Intelligent Service Trusted Provision Approach for IoT", IEEE Internet of Things Journal, accepted.
- J314. Quan Chen, Song Guo, Zhipeng Cai, Jing Li, Tuo Shi, and Hong Gao, "Peak AoI Minimization at Wireless-Powered Network Edge: from the Perspective of Both Charging and Transmitting", IEEE/ACM Transactions on Networking, accepted.
- J313. Tao Guo, Song Guo, Junxiao Wang, and Wenchao Xu, "PromptFL: Let Federated Participants Cooperatively Learn Prompts Instead of Models - Federated Learning in Age of Foundation Model", IEEE Transactions on Mobile Computing, accepted.
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- C240. Jing Li, Song Guo, Weifa Liang, Jie Wu, Quan Chen, Zichuan Xu, Wenzheng Xu, and Jianping Wang, "Wait for Fresh Data? Digital Twin Empowered IoT Services in Edge Computing", IEEE International Conference on Mobile Ad-Hoc and Smart Systems (MASS), Toronto, Canada, September 25-27, 2023.
- C239. Zicong Hong, Song Guo, Enyuan Zhou, Wuhui Chen, Huawei Huang, and Albert Zomaya, "GriDB: Scaling Blockchain Database via Sharding and Off-Chain Cross-Shard Mechanism", 49th International Conference on Very Large Data Bases (VLDB), Vancouver, Canada, August 28 September 1, 2023.
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- C211. 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.
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- C199. 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 Processing Systems (NeurIPS), December 6-14, 2021.
- C198. 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.
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- tions 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).
- P2. 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).
- P1. Yanjie Dong, Jianqiang Li, Victor Leung, Haijun Zhang, Song Guo, and Fei Yu, "A Carbon-Neutral Precoding Method for Wireless Cooperative Multi-point Transmission Systems", No.202111100996X, granted, (一种面向无线多点协作传输系统的碳中和预编码方法).

TEACHING

The Hong Kong Polytechnic University

Semester	Course	Title	Level
20-23	COMP5434	Big Data Computing	Master
20-21	COMP6434	Big Data Analytics and Artificial Intelligence	Doctoral
16-22	COMP4434	Big Data Analytics	Senior
16-18	COMP2411	Database Systems	Junior
17-18	COMP2121	E-Business	Junior

The University of Aizu

Semester	Course	Title	Level
08-16	F6	Operating Systems	Senior
08-16	N5	Performance Evaluation	Senior
09-10	SE6	Distributed Computing	Senior
10-16	CAN03	Wireless and Mobile Networks	Graduate
10-16	CAN04	Performance Evaluation of Network Systems	Graduate
09-15	SYA12	Best Practices in Embedded Software Development	Graduate
13-16	CNC03	Selected Topics of Future Internet	Graduate
14-16	RPW	Research Paper Writing Seminar	Graduate

University of Northern British Columbia

Semester	Course	Title	Level
06-07	CPSC 100	Computer Programming	Junior
06-07	CPSC 622	Database Systems	Graduate
06-07	CPSC 643	Mobile Computing	Graduate
06-07	CPSC 250	Applied Business Computing	Junior

ADVISING

• Postdoctoral Fellows: 20+

PhD Students: 30+Master Students: 30+

• Undergraduate Students: 50+

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, Academia Europaea (MAE)
- 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

Service for Societies

- Member of Fellow Evaluation Committee, IEEE Communications Society, 2023-2025
- Member of Fellow Evaluation Committee, IEEE Computer Society, 2020-2022
- 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), 2020-2022
- 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, 2017-2022
- 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
- Secretory 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), 2020-2022

Journal Editorship

- Editor-in-Chief, IEEE Open Journal of the Computer Society, 2020-now
- Associate Editor, IEEE Transactions on Computers, 2022-now
- Associate Editor, ACM Computing Surveys, 2022-now
- Area Editor, IEEE Open Journal of the Communications Society, 2019-2019

- Associate Editor, IEEE Transactions on Parallel and Distributed Systems, 2011-2015
- Associate Editor, IEEE Transactions on Cloud Computing, 2018-2022
- 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, 2018-now
- Series Editor, IEEE Communications Magazine, 2016-2018
- Advisory Board Member, Journal of Sensor and Actuator Networks, 2022-now
- 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, 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

Conference Chairs

2023

- General Chair: IEEE International Conference on Big Data and Cloud Computing (BDCloud), Wuhan, China, December 21-24, 2023.
- General Chair: 2023 IEEE 98th Vehicular Technology Conference (VTC2023-Fall), Hong Kong, October 10-13, 2023.
- Symposium Co-Chair: IEEE/CIC International Conference on Communications in China (ICCC), Dalian, China, August 10–12, 2023.
- Workshop Chair: International Conference on Computing, Networking and Communications (ICNC), Hawaii, USA, February 20-22, 2023.

2022

- TPC Co-Chair: International Symposium on Satellite Communication Systems & Services (SCSS), Jeju, Korea, October 20, 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 (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 Veri-

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

- 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 (IC-PADS), Hong Kong, December 2-4, 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 (ICNC), Hawaii, USA, February 17-20, 2020.

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.

2018

- Program Chair: International Conference on 5G for Ubiquitous Connectivity (5GU), Nanjing, China, December 4-5, 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, USA, April 15-19, 2018.
- Symposium Co-Chair: International Conference on Computing, Networking and Communications (ICNC), Maui, USA, March 5-8, 2018.

- Symposium Co-Chair: IEEE Global Communications Conference (GlobeCom), Singapore, December 4-8, 2017.
- Workshop Chair: IEEE International Conference on Mobile Ad-Hoc and Smart Systems (MASS), Orlando, USA, October 22-25, 2017.
- Symposium Co-Chair: International Conference on Wireless Communications and Signal Processing (WCSP), Nanjing, China, October 11-13, 2017.
- Poster Chair: International Symposium on Reliable Distributed Systems (SRDS), Hong Kong, September 26-29, 2017.
- General Chair: IEEE Cyber Science and Technology Congress (CyberSciTech), Orlando, USA, August 12-22, 2017.
- General Chair: International Conference on Big Data Science and Engineering (BigDataSE),

- Sydney, Australia, August 1-4, 2017.
- Program Chair: IEEE International Symposium on Future Cyber Security Technologies (FCST), Exeter, United Kingdom, June 21-23, 2017.

- Program Chair: IEEE International Conference on High Performance Computing and Communications (HPCC), Sydney, Australia, December 12-14, 2016.
- General Chair: IEEE International Symposium on Future Cyber Security Technologies (FCST), Nagasaki, Japan, November 11-13, 2016.
- Workshop Chair: IEEE International Conference on Wireless and Mobile Computing, Networking And Communications (WiMob), October 17-19, 2016.
- Symposium Chair: IEEE/CIC International Conference on Communications in China (ICCC), Chengdu, China, October 14-17, 2016.
- Program Chair: International Conference on Big Data Intelligence and Computing (DataCom), Auckland, New Zealand, August 8-12, 2016.
- General Chair: EAI International Conference on Tools for Design, Implementation and Verification of Emerging Information Technologies (TridentCom), Hangzhou, China, June 13-15, 2016.
- Symposium Co-Chair: IEEE International Conference on Communications (ICC), Kuala Lumpur, Malaysia, May 23-27, 2016.
- Track Co-Chair: IEEE Conference on Vehicular Technology (VTC), Nanjing, China, May 15-18, 2016.
- Program Chair: International Workshop on Big Data Sciences, Technologies, and Applications (in conjunction with INFOCOM), San Francisco, USA, April 10-14, 2016.
- Symposium Chair: International Conference on Computing, Networking and Communications (ICNC), Kauai, USA, February 15-18, 2016.

2015

- Symposium Co-Chair: IEEE Global Communications Conference (Globecom), San Diego, USA, December 6-10, 2015.
- General Chair: EAI International Conference on Collaborative Computing: Networking, Applications and Worksharing (CollaborateCom), Wuhan, China, November 10-11, 2015.
- Symposium Co-Chair: IEEE Region 10 Symposium (TENSYMP), Ahmedabad, India, May 13-15, 2015.
- Track Chair/Co-Chair: International Conference on Big Data Computing Service and Applications (BigDataService), Redwood City, USA, March 30 April 2, 2015.
- Publicity Chair: IEEE Wireless Communications and Networking Conference (WCNC), New Orleans, USA, March 9-12, 2015.
- General Chair: EAI International Conference on Industrial Networks and Intelligent Systems (INISCOM), Tokyo, Japan, March 2-4, 2015.

- Program Chair: IEEE International Workshop on Cloud-integrated Cyber Physical Systems (Cloud-CPS), Singapore, December 15-18, 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 (AdHocNow), Benidorm, Spain, June 22-27, 2014.

- Program Chair: International Conference on Mobility, Sensing and Networking (MSN), Dalian, China, December 11-13, 2013.
- General Chair: International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services (MobiQuitous), Tokyo, Japan, December 2-4, 2013.
- Publication Chair: International Symposium on Embedded Multicore/Many-core Systems-on-Chip (MCSoC), Tokyo, Japan, September 26-28, 2013.

2012

- Publication Chair: International Symposium on Embedded Multicore/Many-core Systems-on-Chip (MCSoC), Aizu-Wakamatsu, Japan, September 20-22, 2012.
- Program Vice-Chair: International Conference on Advanced Information Networking and Applications (AINA), Fukuoka-shi, Japan, March 26-29, 2012.

2011

- Program Co-Chair: IEEE/IFIP International Conference on Embedded and Ubiquitous Computing (EUC), Melbourne, 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 (ICESS), Bradford, UK, June 29 July 1, 2010.

2009

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

2008

• International Liaison Co-Chair: International Conference for Young Computer Scientist (ICYCS), Zhang Jia Jie, China, November 18-21, 2008,

Membership in Technical Program Committees

2024

- AAAI Conference on Artificial Intelligence (AAAI), 2024.
- International Conference on Neural Information Processing Systems (NeurIPS), 2024.
- IEEE International Conference on Computer Communications (INFOCOM), 2024.

- The 37th International Conference on Neural Information Processing Systems (NeurIPS), New Orleans, USA, December 10-16, 2023.
- International Conference on Computer Vision (ICCV), Paris, France, October 2-6, 2023.
- The 32nd International Joint Conference on Artificial Intelligence (IJCAI), Cape Town, South Africa, August 19-25, 2023.
- The 40th International Conference on Machine Learning (ICML), Hawaii, USA, July 23-29, 2023.
- 43nd IEEE International Conference on Distributed Computing Systems (ICDCS), Hong Kong, July 18-21, 2023.
- IEEE/CVF Computer Vision and Pattern Recognition Conference (CVPR), Vancouver, Canada,

- June 18-22, 2023.
- IEEE International Conference on Communications (ICC), Rome, Italy, May 28 June 1, 2023.
- IEEE International Conference on Computer Communications (INFOCOM), New York, China, May 17-20, 2023.

- The 36th International Conference on Neural Information Processing Systems (NeurIPS), New Orleans, USA, November 28 December 4, 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, 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, USA, 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.

2019

- IEEE International Conference on Multimedia and Expo (ICME), Shanghai, China, July 8-12, 2019.
- IEEE International Conference on Distributed Computing Systems (ICDCS), Dallas, USA, July 7-9, 2019.
- IEEE International Conference on Communications (ICC), Shanghai, China, May 20-24, 2019.

2018

- IEEE Global Communications Conference (Globecom), Abu Dhabi, UAE, December 9-13, 2018.
- The 14th International Wireless Communications and Mobile Computing Conference (IWCMC), Limassol, Cyprus, June 25-29, 2018.
- IEEE International Conference on Computer Communications (INFOCOM), Honolulu, USA, April 15-19, 2018.

- International Conference on Computer Communication and Networks (ICCCN), Vancouver, Canada, July 31 August 3, 2017.
- IEEE International Conference on Communications (ICC), Paris, France, May 21-25, 2017.
- IEEE International Conference on Computer Communications (INFOCOM), Atlanta, USA, May 1-4, 2017.
- IEEE Wireless Communications and Networking Conference (WCNC), San Francisco, USA, March 19-22, 2017.

- IEEE Global Communications Conference (Globecom), Washington, USA, December 4-8, 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, USA, August 1-4, 2016.
- IEEE International Conference on Distributed Computing Systems (ICDCS), Nara, Japan, June 27-30, 2016.
- IEEE International Conference on Communications (ICC), Kuala Lumpur, Malaysia, May 23-27, 2016.
- IEEE International Conference on Computer Communications (INFOCOM), San Francisco, USA, April 10-15, 2016.
- IEEE Wireless Communications and Networking Conference (WCNC), Doha, Qatar, April 3-6, 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, USA, February 15-18, 2016.

2015

- IEEE International Conference on Parallel and Distributed Systems (ICPADS), Melbourne, Australia, December 14-17, 2015.
- International Conference on Computer Communication and Networks (ICCCN), Las Vegas, USA, August 3-6, 2015.
- IEEE International Conference on Distributed Computing Systems (ICDCS), Columbus, USA, June 29 July 2, 2015.
- Proceedings of the Sixth International Conference on Computational Creativity (ICCC), Park City, 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.
- IEEE Wireless Communications and Networking Conference (WCNC), New Orleans, USA, March 9-12, 2015.

- Annual IEEE International Conference on Computer Communications (INFOCOM), Toronto, Canada, April 27 May 2, 2014.
- IEEE Global Communications Conference (Globecom), Austin, USA, December 8-12, 2014.
- IEEE International Symposium on Embedded Multicore/Manycore SoCs (MCSoC), Aizu-

- Wakamatsu, Japan, September 23-25, 2014.
- IEEE International Conference on High Performance Computing and Communications (HPCC), Paris, France, August 20-22, 2014.
- IEEE Wireless Communications and Networking Conference (WCNC), Istanbul, Turkey, April 6-9, 2014.

- IEEE Global Communications Conference (Globecom), Atlanta, USA, December 9-13, 2013.
- IEEE Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC), London, United Kingdom, September 8-11, 2013.
- The International Wireless Communications and Mobile Computing Conference (IWCMC), Cagliari, Italy, July 1-5, 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.
- International Conference on Computing, Networking and Communications (ICNC), San Diego, USA, January 28-31, 2013.

2012

- International Conference on Mobile Ad-hoc and Sensor Networks (MSN), Chengdu, China, December 14-16, 2012.
- IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS), Las Vegas, USA, October 8-11, 2012.
- IEEE 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.
- 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.
- IEEE International Conference on Computer Communications (INFOCOM), Orlando, USA, March 25-30, 2012.

2011

- ACM Research in Applied Computation Symposium (RACS), Miami, USA, October 19-22, 2011.
- IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS), Valencia, Spain, October 17-21, 2011.
- IEEE Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Toronto, Canada, September 11-14, 2011.
- International Wireless Communications and Mobile Computing Conference (IWCMC), Istanbul, Turkey, July 4-8, 2011.
- IEEE Wireless Communications and Networking Conference (WCNC), Cancun, Mexico, March 28-31, 2011.

- IEEE/IFIP International Conference on Embedded and Ubiquitous Computing (EUC), Hong Kong, December 11-13, 2010.
- IEEE Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), September 26-29, 2010.
- International Symposium on Embedded Multicore SoCs (MCSoC), San Diego, USA, September 13-16, 2010.
- IEEE Wireless Communications and Networking Conference (WCNC), Sydney, Australia, April 18-21, 2010.

- 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.

2008

- IEEE/IFIP International Conference on Embedded and Ubiquitous Computing (EUC), Shanghai, China, December 17-20, 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, USA, March 31 April 3, 2008.

2007

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

UNIVERSITY SERVICE ACTIVITIES

The Hong Kong Polytechnic University

- Associate Head, Department of Computing, 2019-2021
- Director of Edge Intelligence Lab, Department of Computing, 2016-present
- Member of Department Management Committee, Department of Computing, 2019-2021
- Member of Faculty Staffing Committee, Faculty of Engineering, 2019-2023
- Leader of Networking and Mobile Computing Research Group, Department of Computing, 2019present
- Representative for Doctor of FinTech Programme (hosted by Faculty of Business), Department of Computing, 2020-present
- Member of DFinTech Programme Committee, Faculty of Business, 2020-present
- Seminar Coordinator, Department of Computing, 2020-2021
- HKPFS Coordinator, Department of Computing, 2019-2021

- Member of Department Staffing Committee, Department of Computing, 2017-2019
- Member of Department Research Committee, Department of Computing, 2017-2021
- Chair of Department Research Committee, Department of Computing, 2016-2017
- Member of Department Heads Group, Department of Computing, 2016-2017
- Member of Faculty Research Committee, Faculty of Engineering, 2016-2017
- Member of Department Management Committee, Department of Computing, 2016-2017
- Research Club Director of Challengers Program, Department of Computing, 2016-2017

The University of Aizu

- Leader, University Strategic Research Project on Internet-of-Things, 2015-2016
- Member of Graduate School Academic Affairs Committee, 2014-2016
- Member of Super Global University Program Committee, 2014-2016
- Member of Graduate School Entrance Examination Committee, 2012-2016
- Member of Working Group for Internationalization, 2012-2015
- Director, WG of Faculty Colloquium on Collaborative Research Excellence, 2012-2015
- Member of Health and Welfare Guidance Committee, 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