Curriculum Vitae - Victor C. M. Leung

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Research Areas:

Wireless networks and mobile systems. ICT applications, system architectures, cloud computing, software defined networks, network function virtualization, radio access, protocols, management algorithms, performance evaluations.

Academic Qualifications:

- BASc (Honors) in Electrical Engineering, UBC, 1977
- PhD in Electrical Engineering, UBC, 1982

Professional Experience:

- TELUS Mobility Research Chair in Advanced Telecommunications Engineering, UBC (2000 present)
- Professor of Electrical and Computer Engineering, UBC (1999 present)
- Associate Head for Graduate Affairs, Dept. Electrical and Computer Engineering, UBC (2004 2006)
- Associate Professor of Electrical and Computer Engineering, UBC (1994 1999)
- Assistant Professor of Electrical Engineering, UBC (1989 1994)
- Lecturer, Dept. of Electronics, Chinese University of Hong Kong (1988)
- Visiting Assistant Professor, School of Engineering Science, Simon Fraser University, BC (1986 1987)
- Senior Member of Technical Staff, Microtel Pacific Research Ltd., Burnaby, BC (1981 1987)
- Consultants to Transport Canada, MPR Teltech, Inside Software and Strategy Management, Telesat, VISTAR Canada, IMT Communications Systems, OMNEX Control Systems, and Ontario Council of Graduate Studies.

Honours:

Fellowships:

- (2013) Elected Fellow of Royal Society of Canada, Academy of Science
- (2009) Elected Fellow of Engineering Institute of Canada
- (2008) Elected Fellow of Canadian Academy of Engineering
- (2003) Elected Fellow of IEEE (Institute of Electrical and Electronics Engineers)

Research Chair, Professorships, Lectureship

- (2000–) Inaugural holder of TELUS Mobility Research Chair in Advanced Telecommunications Engineering
- (2009-2012) IEEE ComSoc Distinguished Lecturer
- (2010-2020) Honorary Guest Professor, Beijing University of Posts and Telecommunications
- (2010-2016) Adjunct Professor, The Hong Kong Polytechnic University
- (2009-2012) Honorary Guest Professor, South China University of Technology
- (2008-2011) Honorary Guest Professor, Beijing Jiaotong University
- (2006-2012) Honorary Guest Professor, Jilin University

Invited Keynote Presentations:

- "Video Game as a Service Cloud Computing Enabled Video Gaming Anywhere on Any Device", IEEE TrutCom/BigDataSE/ISPA 2016, Tianjin, China, Aug. 2016.
- "AURORA A Test Bed for Connected Vehicle Research", 2nd International Conference on Internet of Vehicles (IoV 2015), Chengdu, China, Dec. 2015.
- "Green Internet of Things for Smart Cities", SWANSITY Smart Wireless Networks for Smart City Workshop at IEEE SECON 2015, Seattle, WA, July 2015.
- "The AURORA Test Bed Lighting Up the UBC Campus for ITS Research", 3rd International Conference on Transportation Information and Safety (ICTIS 2015), Wuhan, China, June 2015.
- "Green Internet of Things for Smart Cities", International Workshop on Smart Cities and Urban Informatics at IEEE Infocom 2015, Hong Kong, China, Apr. 2015.
- "Green Internet of Things", 4th IEEE Online Conference on Green Communications, Nov. 2014.
- "Video Game as a Service Cloud Computing Enabled Mobile Video Gaming", 28th IEEE International Conference on Advanced Information Networking and Applications (AINA), Victoria, BC, May 2014.
- "Broadband Wireless Access in 3D Environment Using Fibre-connected Massively Distributed Antennas", International Congress on 3D IT, Communications, and Convergence (3DITCom), Gwanju, Korea, Sep. 2013.

- "Fibre-connected Massively Distributed Antenna Systems Application in High-Speed Rail Communications", IEEE International Conference on Intelligent Rail Transportation (ICIRT), Beijing, China, Aug. 2013.
- "Green Communications Using Fibre-connected Massively Distributed Antennas", 3rd International Conference on Selected Topics in Mobile and Wireless Networking (MoWNet), Montreal, QB, Aug. 2013.
- "Mobile Cloud Computing Research Issues and Application in Mobile Gaming", IEEE Asia Pacific Cloud Computing Congress 2012, Shenzhen, China, Nov. 2012.
- "Robust Access for Wireless Body Area Sensor Networks", 2nd IEEE International Conference on Cloud Computing and Intelligence Systems, Hangzhou, China, Oct. 2012.
- "Robust Access for Wireless Body Area Sensor Networks", 7th International Conference on Body Area Networks (Bodynets 2012), Oslo, Norway, Sep. 2012.
- "Networking of Vehicles Applications, Challenges and Some Recent Results", 4th IFIP Wireless Days, Niagara Falls, ON, Oct. 2011.
- "Networking of Vehicles Applications, Challenges and Some Recent Results", i 8th International Conference on Ubiquitous Intelligence and Computing (UIC 2011), Banff, AB, Sep. 2011.
- "Wireless-Optical Convergence: The Case for Fibre-connected Massively Distributed Antennas", 4th International Workshop on Forefront Wireless Communications and Optical Communications and Network Technology, Harbin, China, Aug. 2011.
- "Breaking the Silos Access and Service Convergence over the Mobile Internet", 11th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM), Vancouver, BC, Oct., 2008.
- "Mobile Agents for Adaptive Reconfigurable Wireless Networks", International Wireless Communications and Mobile Computing Conference, Crete, Greece, Aug. 2008.
- "Filling the Generation Gap Convergence in Wireless Networking", IEEE 21st International Conference on Advanced Information Networking and Applications (AINA 2007), Niagara Falls, ON, May 22, 2007.
- "Advances in Wireless Personal Area Networking", 5th International Conference on Ad-hoc Networks & Wireless (Ad-hoc Now 2006), Ottawa, ON, Aug. 2006.
- "From POTS to PANS The Wireless Networking Perspective", IASTED WOC2003, Banff, AB, July 2003.

Best Paper Awards:

- (2017) IEEE ComSoc Fred W. Ellersick Prize awarded to the best original paper in any ComSoc magazine in the previous 3 calendar years, for the paper "Cache in the Air: Exploiting Content Caching and Delivery Techniques for 5G Systems", IEEE Communications Magazine, Vol. 52, Issue 2, Page 131-139, February 2014.
- (2016) Best Paper Award of 7th IEEE INFOCOM Workshop on Mobility Management for the Networks of the Future World (MobiWorld), San Francisco, USA, Apr. 2016 paper titled "Simplified Wireless Connectivity for 5G Machine Type Communication", co-authored with P. TalebiFard, S. Preda, C. Truchan, and S. Krishnan.
- (2014) Best Paper Award of 6th IEEE International Conference on Cloud Computing Technology and Science (CloudCom), Singapore, Dec. 2014 for paper titled "Ad-hoc Cloudlet Based Cooperative Cloud Gaming", co-authored with F. Chi, X. Wang, and W. Cai.
- (2014) Best Paper Award, International Conference on Smart Computing (SmartComp), Hong Kong, China, Nov. 2014 for paper titled "Reputation-based Multiplayer Fairness for Ad-hoc Cloudlet-assisted Cloud Gaming System", co-authored with Zhen Hong, Wei Cai and Xiaofei Wang.
- (2012) Best Paper Award, 2nd IEEE International Conference on Cloud Computing and Intelligence Systems, Hangzhou, China, Oct. 2012 for paper titled "Multiple Tags Identification for Short ID RFID Networks", coauthored with Hongbo Guo.
- (2009) Best Paper Award, First International Conference on Evolving Internet (INTERNET 2009), Cannes/La Bocca, French Riviera, France, Aug. 2009 for paper titled "Collision Avoidance and Mitigation in Cognitive Wireless Local Area Network over Fibre", co-authored with Haoming Li, Alireza Attar and Qixiang Pang.
- (2009) Best Paper Award, IEEE/IFIP International Symposium on Trusted Computing and Communications, Vancouver, BC, Aug. 2009 for paper titled "Distributed Node Selection for Threshold Key Management with Intrusion Detection in Mobile Ad Hoc Networks", co-authored with F. Richard Yu, Helen Tang and Fei Wang
- (2008) Best Paper Award, IEEE PIMRC, Cannes, France, Sep. 2008 for paper titled "Reducing Re-authentication Delays During UMTS-WLAN Vertical Handovers", co-authored with Ali Al Shidhani
- (2008) Best Paper Award, IEEE Broadnets, London, UK, Sep. 2008 for paper titled "A Cross-layer Scheduling Scheme for Wireless Multimedia Transmissions with Adaptive Modulation and Coding", co-authored with Hui Chen and Henry Chan
- (2008) Best Paper Award, Chinacom, Hangzhou, China, Aug. 2008 for paper titled "Energy-efficient Tree-based Message Ferrying Routing Schemes for Wireless Sensor Networks", co-authored with Y.-H. Zhu, W.-D. Wu and L.-H. Yang
- (2008) Best Paper (Runner-up) Award, Qshine, Hong Kong, China, July 2008, for paper titled "Directional Controlled Fusion in Wireless Sensor Networks", co-authored with Min Chen and Shiwen Mao

Academic and Technical Awards

- (2017) Canadian Award for Telecommunications Research
- (2012) UBC Killam Research Prize
- (2011) IEEE Vancouver Section Centennial Award
- (1977-1981) NSERC Postgraduate Scholarship
- (1977) APEBC Gold Medal as head of graduating class in Faculty of Applied Science, UBC

Graduate Supervision:

- 29 PhD's, 82 MASc/MEng's completed
- 10 PhD's, 4 MASc/MEng in progress

Selected Recent Research Projects (as Principal Investigator):

- "Smart Infrastructures for Radio Access as a Service (SIRAS) Software-defined Wireless Access Networks for Future Generations", NSERC Discovery Grant and NSERC Discovery Accelerator Supplement Grant, \$525,000, 2014-2019 (top award in 2014 NSERC Discovery Grant competition for electrical & computer engineering).
- "Cognitive platform for ubiquitous cloud-based gaming", NSERC Strategic Project Grant, \$495,000 total, 2013-2016.
- "Wireless Sensor Networks for Video Surveillance", BCIC NRAS Grant, \$300,000 total, 2011-2013.
- "Scalable detection of dense RFID tags", NSERC I2I Grant, \$125,000, 2011-2012.
- Project Grants from NSERC DIVA Strategic Research Network Developing Next Generation Intelligent Vehicular Networks and Applications, \$ 939,500 total, 2010-2015.
- "Context-aware Services in Next Generation Networks with Applications to Vehicular Networking Environments", TELUS Grant, \$400,000 total, 2010-2015.
- "Next generation broadband wireless access employing fibre-connected massively distributed antennas", NSERC Strategic Project Grant, \$687,000 total, 2010-2013.
- "Exploiting cognition and adaptivity in advanced wireless network system designs", NSERC Discovery Grant, \$280,000 total, 2009-2014.
- "Distributed antenna system and signal processing platform for broadband wireless communications", NSERC Research Tools and Instrument Grant, \$150,000, 2009-2010.
- "Enabling Technologies for Secure and Reliable Wireless Body Area Sensor Networks", NSERC Strategic Project Grant, \$615,100 total, 2008-2011.
- "Vehicular Telematics over WiFi and WiMax Multihop Networks", AUTO21 and Nokia Grant, \$836,125 total, 2008-2013.

Service to the Technical and Academic Community

Selected Editorships:

- Area Editor, IEEE Transactions on Green Communications and Networking, (2016-).
- Associate Editor, IEEE Access, (2015 -).
- Editor, IEE E JSAC Series on Green Communications and Networking, (2015-2016).
- Guest editor, IEEE Transactions on Emerging Topics in Computing, special issue on "Advances in Mobile Cloud Computing", 2015.
- Guest editor, IEEE Communications Magazine, special issue on "Internet of Things/M2M from Research to Standards", 2015.
- Guest editor, IEEE Network, special issue on "Unveiling 5G Wireless Networks: Emerging Research Advances, Prospects, and Challenges", 2014.
- Guest editor, IEEE Systems Journal, special issue on "Cloud Computing on Multimedia", vol. 8, no. 1, Mar. 2014.
- Associate Editor, IEEE CloudLink (2013 -), an e-publication of the IEEE Cloud Computing Initiative.
- Guest editor, IEEE Network, special issue on "Cloud-Assisted Mobile Computing and Pervasive Services", vol. 27, no. 5, Sep. 2013.
- Guest Editor, The Computer Journal, Special Issue on "Green Mobile Networking and Communications", vol. 56, no. 8, August 2013.
- Guest editor, IEEE Wireless Communications, special issue on "Mobile Cloud Computing", vol. 20, no. 3, June 2013.
- Guest editor, ACM/Springer Mobile Networks and Applications, special issue on "Recent Advances on Communications and Networking in China", vol. 18, no. 2, Apr. 2013.
- Guest editor, ACM Transactions on Embedded Computing Systems, special issue on "Embedded Systems for Interactive Multimedia Services", vol. 12, no. 2, Feb. 2013.
- Guest editor, Computer Communications, special issue on "Smart and Interactive Ubiquitous Multimedia Services", vol. 35, no. 15, Sep. 2012.
- Senior Editor, IEEE Wireless Communications Letters (2011–)
- Associate Editor, IET Networks (2011–)

- Guest editor, ACM Trans. Embedded Computing Systems, Special Issue on Embedded Systems for Interactive Multimedia Services, 2011.
- Guest editor, IEEE VTS Magazine, Special Issue on WWRF 24th meeting, 2010.
- Guest editor, ACM/Springer Mobile Networks and Applications, Special Issue on Ubiquitous Body Sensor Networks, 2010.
- Editor, Journal of Communications and Networks (2009–2013)
- Area Editor, Computer Communications (2008–)
- Associate Editor, IEEE Transactions on Computers (2007–2012)
- Guest editor, IEEE Communications Magazine, vol. 45, no. 9, Feature Topic on Technologies in Multihop Cellular Networks, Sep. 2007.
- Guest editor, Signal Processing, vol. 87, no. 12, Special Issue on Information Processing and Data Management in Wireless Sensor Networks, December 2007.
- Guest editor, Journal of Wireless Communications and Mobile Computing, vol. 5, no. 4, Special Issue on Radio Link and Transport Protocol Engineering for Future-Generation Wireless Mobile Data Networks, June 2005.
- Editor, IEEE Transactions on Wireless Communications (2002–2009).
- Associate Editor, IEEE Transactions on Vehicular Technology (2001–2008).
- Editor, IEEE Journal on Selected Areas in Communications Wireless Communications Series (1999–2001).

Selected Conference Organization and Technical Program Committee Participation:

- General Chair, 14th IEEE International Conference on Mobile Ad hoc and Sensor Systems (IEEE MASS), Orlando, FL, Nov. 2017.
- General Chair, 2nd International Conference on Smart Grid Inspired Future Technologies (SmartGIFT), London, UK, Mar. 2017.
- General Co-chair, IEEE International Conference on Green Computing and Communications (GreenCom), Chengdu, China, Dec. 2016.
- TPC Co-chair of Green Communications and Networks Track, 84th IEEE Vehicular Technology Conference (VTC2016-Fall), Montréal, Canada, Sep. 2016.
- General Co-chair, 1st International Conference on Smart Grid Inspired Future Technologies (SmartGIFT), Liverpool, UK, May 2016.
- TPC Co-chair of Communications and Networks Track, 29th IEEE Canadian Conference on Electrical and Computer Engineering (CCECE), Vancouver, Canada, May 2016.
- Honorary Chair, 6th International Conference on Game Theory for Networks (GamesNet), Kelowna, BC, May 2016.
- General Co-chair, 7th IEEE International Conference on Cloud Computing Technology and Science (CloudCom), Vancouver, BC, Nov. 2015.
- Tutorial Co-chair, 26nd IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Hong Kong, China, Sep. 2015.
- General Chair, Workshop on Green Communications and Networks with Energy Harvesting, Smart Grids, and Renewable Energies at IEEE ICC 2014, London, UK, June 2015.
- General Chair, Workshop on Mobile Cloud and Virtualization at IEEE Infocom 2015, Hong Kong, China, Apr. 2015.
- General Co-chair, 8th International Conference on Frontier of Computer Science and Technology, (FCST), Chengdu, China, Dec. 2014.
- TPC Co-chair of IoT and Mobile on Cloud Track, 6th IEEE International Conference on Cloud Computing Technology and Science (CloudCom), Singapore, Dec. 2014.
- TPC Vice-chair, 1st IEEE International Conference on Smart Computing (SmartComp), Hong Kong, Nov. 2014.
- General Co-chair, 5th International Conference on Cloud Computing (CloudComp), Guilin, China, Oct. 2014.
- Honorary Program Chair, Computing, Communications and IT Applications Conference (ComComAp), Beijing, China, Oct. 2014.
- General Co-chair, 6th IEEE International Symposium on Wireless Vehicular Communications (WiVEC), Vancouver, BC, Sep. 2014.
- General Co-chair, International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (QShine), Rhodes, Greece, Aug. 2014.
- General Co-chair, International Conference on Internet of Vehicles (IOV), Beijing, China, Aug 2014.
- General Chair, 9th International Conference on Testbeds and Research Infrastructures for the Development of Networks & Communities (TRIDENTCOM), Guangzhou, China, May 2014.
- General Chair, Workshop on Mobile Cloud Computing at Infocom 2014, Toronto, ON, Apr. 2014.
- General Co-chair, International Conference on Creative Converged IT (CCIT), Daejeon, Korea, Apr. 2014.
- TPC Co-chair of IoT and Mobile on Cloud Track, 5th IEEE International Conference on Cloud Computing Technology and Science (CloudCom 2013), Bristol, UK, Dec. 2013.
- General Chair, 4th International Conference on Cloud Computing (CloudComp 2013), Wuhan, China, Oct. 2013.
- General Co-chair, IEEE International Conference on Green Computing and Communications (GreenCom2013), Beijing, China, Aug. 2013.

- TPC Co-chair, 8th International Conference on Embedded and Multimedia Computing (EMC 2013), Taipei, Taiwan, Aug. 2013.
- General Co-chair, International Conference on Advanced IT, Engineering and Management (AIM-13), Seoul, Korea, Feb. 2013.
- General Co-chair, 12th IEEE International Conference on Computer and Information Technology (CIT 2012), Chengdu, China, Oct. 2012.
- General Co-chair, Workshop on Green Communications and Networking (GCN 2012) at ICC 2012, Ottawa, ON, Jun. 2012.
- General Co-chair, 6th FTRA International Conference on Future Information Technology (FutureTech 2012), Vancouver, BC, June 2012.
- General Co-chair, 3rd FTRA International Conference on Mobile, Ubiquitous, and Intelligent Computing (MUSIC 2012), Vancouver, BC, June 2012.
- General Co-chair, Workshop on "Communications and Control for Sustainable Energy Systems: Green Networking and Smart Grids" at Infocom 2012, Orlando, FL, Mar. 2012.
- TPC Co-chair of MAC and Cross-Layer Design Track, IEEE Wireless Communications and Networking Conference (WCNC 2012), Paris, France, Apr. 2012.
- General Co-chair, 3rd International Conference on Computer Science and its Applications (CSA 2011), Jeju, Korea, Dec. 2011.
- TPC Co-chair of Mobile Convergence Networks Track, International Conference on ICT Convergence (ICTC 2011), Seoul, Korea, Sep. 2011.
- General Co-chair, 6th International ICST Conference on Communications and Networking in China (Chinacom 2011), Harbin, China, Aug. 2011.
- General Chair, Workshop on Green Communications and Networking (GCN 2011) at Infocom 2011, Shanghai, China, Apr. 2011.
- General Co-Chair, 3rd International Workshop on Mobile IPv6 and Network-based Localized Mobility Management (MobiWorld 2011) at Infocom 2011, Shanghai, China, Apr. 2011.
- General Co-Chair, IEEE International Workshop on Advanced Sensor Integration Technology (ASIT 2010) at Globecom 2010, Miami, Florida, USA December 6-10, 2010.
- General Co-Chair, Fifth International Conference on Body Area Networks (Bodynets 2010), Corfu Island, Greece, Sep. 2010.
- General Chair, Second International Conference on Ad Hoc Networks (Adhocnets 2010), Victoria, BC, Aug. 2010.
- General Co-Chair, 5th International Conference on Embedded and Multimedia Computing (EMC 2010), Cebu, Philippines, Aug. 2010.
- General Chair, IASTED International Conference on Wireless Communications, Banff, Alberta, July 2010.
- General Co-Chair, 2nd IEEE Workshop on Cognitive Wireless Communications and Networking (CWCN) at Infocom 2010, San Francisco, CA, Apr. 2010.
- General Co-Chair, 2nd International Workshop on Mobile IPv6 and Network-based Localized Mobility Management (MobiWorld 2010), Las Vegas, NV, Jan. 2010.
- General Co-Chair, Workshop on Cognitive Wireless Communications and Networking (CWCN), St. Petersburg, Russia, Oct. 2009.
- General Co-chair, International Workshop on Advanced Sensor Integration Technology, Niagara Falls, ON, Sep. 2009.
- Local Chair, IEEE International Conference on Ultra-wideband, Vancouver, BC, Canada, Sep. 2009.
- General Co-chair, IEEE/IFIP International Conference on Embedded and Ubiquitous Computing, Vancouver, BC, Canada, Aug. 2009.
- General Co-chair, Joint Workshop on Cognitive Wireless Networks and Systems Cognitive Radio Networking, Dresden, Germany, June 2009.
- General Co-chair, International Workshop on Pervasive Computing Systems and Infrastructures, Washington, DC, Apr. 2009.
- General Co-chair, Workshop of Mobile Computing, Wireless Communications, and U-Learning, International Computer Symposium, Tamkang, Taiwan, Dec. 2008.
- Sponsorship Co-chair, ACM Multimedia Conference, Vancouver, BC, Canada, Nov. 2008.
- TPC Chair, wireless networking and cognitive radio track, IEEE VTC-fall 2008, Calgary, AB, Sep. 2008.
- General Chair, Qshine 2007: International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness, Vancouver, BC, Canada, Aug. 2007.
- Steering Committee Co-chair, International Workshop on Mobile IPv6 and Network-based Localized Mobility Management, Ilan, Taiwan, Sep. 2008.
- Chair, Next Generation Mobile Networks Symposium, International Wireless Communications and Mobile Computing Conference, Crete Island, Greece, Aug. 2008.
- Chair, Next Generation Mobile Networks Symposium, International Wireless Communications and Mobile Computing Conference, Honolulu, WI, Aug. 2007.

- Chair, Next Generation Mobile Networks Symposium, International Wireless Communications and Mobile Computing Conference, Vancouver, BC, July 2006.
- General Co-Chair, ACM/IEEE Symposium on Modeling, Analysis and Simulation of Wireless and Mobile Systems, Montreal, PQ, Oct. 2005.
- Technical Program Committee Vice-chair for networking, IEEE Wireless Communications and Networking Conference, New Orleans, Mar. 2005.
- Member of Technical Program Committee of over 100 international conferences; e.g., IEEE International Communications Conference, IEEE Global Telecommunications Conference, IEEE Vehicular Technology Conference, IEEE Wireless Communications and Networking Conference.

Selected Panel and Board Membership:

- Member, Board of Directors, NSERC DIVA Strategic Research Network (2010–2016)
- Overseas Academic Advisor, The Hong Kong Polytechnic University (2011-2017)
- Member, ITS Canada IntelliDrive Task Force (2009–2015)
- Member, Advisory Board, Security and Communication Networks Journal (2007–)
- Member, Advisory Board, International Journal of Parallel, Emergent and Distributed Systems (2007–)
- Panelist, NSF Grant Review Panel for Communications and Networking, 2002.
- Member, Board of Directors and Executive Committee, Canadian Institute for Telecommunications Research NCE (2000-02).
- Site Visit Committee, MASc/MEng program in Electrical and Computer Engineering, Ryerson University, ON, 2000.

Peer Reviews

- Research grant applications Natural Sciences and Engineering Research Council (NSERC) of Canada, Science Council of British Columbia, National Science Foundation of USA, University Grants Council of Hong Kong, Austrian Science Foundation, Flemish Institute for the Promotion of Scientific-Technological Research in Industry, Singapore Agency for Science, Technology and Research.
- Canada Research Chair Program, Canada Foundation for Innovations, NSERC Steacie Fellowship, Canada Arts Council Killam Fellowship, NSERC Industrial Research Chair.
- Promotion and tenure cases 16 cases at Virginia Tech., UWO, U. Ottawa, HKU, NUS, GMU, U. Toronto, U. Waterloo, City U. Hong Kong, NTU, U. Manitoba, U. Victoria.
- PhD external examiner for 13 PhD theses at Simon Fraser U., U. Victoria, U. Waterloo, U. Toronto, National U. of Singapore, U. Manitoba, McGill U., U. Ottawa.
- Reviewer for IEEE Transactions on Communications, Vehicular Technology, Networking, Multimedia, Journal on Selected Areas in Communications, Communications Letters; ACM Wireless Networks, Mobile Networks and Applications, Mobile Computing and Communications Review; IEE Proc. Computers and Digital Techniques, Electronics Letters; Wireless Personal Communications; Computer Networks; Journal of Communications and Networks; International Journal of Parallel and Distributed Systems; European Transactions on Telecomm.; The Computer Journal
- Reviewer for numerous conference submissions.

Refereed Publications (bold type face indicates more than 50 citations)

Archival Journal Papers (Selected from 411 Papers Accepted or Published)

- 1. N. Zhao, S. Zhang, F.R. Yu, Y. Chen, A. Nallanathan and V.C.M. Leung, Exploiting Interference for Energy Harvesting: A Survey, Research Issues and Challenges", *IEEE Access*, accepted May 2017.
- 2. <u>W. Cai</u>, <u>F. Chi</u> and V.C.M. Leung, "Cognitive Gaming", *IEEE IT Professional*, accepted May 2017.
- 3. Y. Liu, X. Li, F.R. Yu, H. Ji, H. Zhang and V.C.M. Leung, "Grouping and Cooperating among Access Points in User-centric Ultra-dense networks with Non-orthogonal Multiple Access", *IEEE Journal on Selected Areas in Communications*, accepted Apr. 2017.
- 4. F. Fang, H. Zhang, J. Cheng, S. Roy and V.C.M. Leung, "Joint User Scheduling and Power Allocation Optimization for Energy Efficient NOMA Systems With Imperfect CSI", *IEEE Journal on Selected Areas in Communications*, accepted Apr. 2017.
- 5. <u>C. Zhu</u>, H. Zhou, V.C.M. Leung, Y. Zhang and L.T. Yang, "Toward Big Data in Green City", *IEEE Communications Magazine*, accepted Apr. 2017.
- 6. N. Zhao, X. Zhang, F.R. Yu, Y. Chen, M. Jin and V.C.M. Leung, "Artificial Noise Assisted Secure Interference Networks with Wireless Power Transfer", *IEEE Trans. Vehicular Technology*, accepted Apr. 2017.
- 7. H. Zhang, S. Huang, C. Jiang, K. Long, V.C.M. Leung and V. Poor, "Energy Efficient User Association and Power Allocation in Ultra-Dense Millimeter Wave Networks with SWIPT", *IEEE Journal on Selected Areas in Communications*, accepted Mar. 2017.
- 8. <u>M.G. Khoshkholgh</u> and V.C.M. Leung, "On the Performance of MIMO-SVD Multiplexing Systems in HetNets: A Stochastic Geometry Perspective", *IEEE Trans. Vehicular Technology*, accepted Feb. 2017.
- 9. <u>X. Li</u>, X. Wang, K. Li and V.C.M. Leung, "CaaS: Caching as a Service for 5G Networks", *IEEE Access*, accepted Feb. 2017.

- 10. F. Kong, X. Sun, V.C.M. Leung and H. Zhu, "Delay-Optimal Biased User Association in Heterogeneous Network", *IEEE Trans. Vehicular Technology*, accepted Jan. 2017.
- 11. <u>N. Arianpoo</u> and V.C.M. Leung, "A Smart Fairness Mechanism for Concurrent Multipath Transfer in SCTP over Wireless Multi-hop Networks," *Ad Hoc Networks*, vol. 55, pp. 40-49, Feb. 2017.
- 12. <u>Y. Dong, X. Ge, J. Hossain, J. Cheng and V.C.M. Leung, "Proportional Fairness Based Beamforming and Signal Splitting for MISO-SWIPT Systems", *IEEE Comm, Letters*, accepted Jan. 2017.</u>
- 13. Y. Zhao, V.C.M. Leung, C. Zhu, H. Gao, Z. Chen and H. Ji, "Energy-Efficient Sub-Carrier and Power Allocation in Cloud-Based Cellular Network with Ambient RF Energy Harvesting", *IEEE Access*, accepted Jan. 2017.
- 14. N. Zhao, X. Zhang F.R. Yu and V.C.M. Leung, "To Align or Not to Align: Topology Management in Asymmetric Interference Networks", *IEEE Trans. Vehicular Technology*, accepted Jan. 2017.
- 15. <u>L. Chen</u>, F.R. Yu, H. Ji, B. Rong, X. Li and V.C.M. Leung, "Green Full-duplex Self-backhaul and Energy Harvesting Small Cell Networks with Massive MIMO", *IEEE J. Sel. Areas Commun.*, vol. 34, no. 12, pp. 3709-3724, Dec. 2016.
- 16. L.P. Qian, G. Feng and V.C.M. Leung, "Optimal Transmission Policies for Relay Communication Networks with Ambient Energy Harvesting Relays", *IEEE J. Sel. Areas Commun.*, vol. 34, no. 12, pp. 3754-3768, Dec. 2016.
- 17. C. Jiang, <u>H. Zhang</u>, Z. Han, H. Lajos, Y. Ren and V.C.M. Leung, "Sharing Genuine Road Traffic Information in Vehicular Networks", *IEEE Trans. Vehicular Technology*, vol. 65, no. 12, pp. 9479-9492, Dec. 2016.
- 18. <u>H. Zhang</u>, Y. Dong, J. Cheng, J. Hossain and V.C.M. Leung, "Fronthauling for 5G LTE-U Ultra Dense Cloud Small Cell Networks", *IEEE Wireless Communications*, vol. 23, no. 6, pp. 48-53, Dec. 2016.
- 19. <u>H. Zhang</u>, K. Long, X. Chu, H. Aghvami and V.C.M. Leung, "Network Slicing Based 5G Networks: Mobility, Resource Management, and Challenges", accepted for publication in *IEEE Communications Magazine*, Dec. 2016.
- 20. <u>M.G. Khoshkholgh</u>, K.G. Shin, K. Navaie and V.C.M. Leung, "Coverage Performance in Multi-Stream MIMO-ZFBF Heterogeneous Networks", *IEEE Trans. Vehicular Technology*, accepted Dec. 2016.
- 21. K. Wang, L. Gu, S. Guo, H. Chen, V.C. M. Leung and Y. Sun, "Crowdsourcing-based Content-Centric Network: A Social Perspective *IEEE Network*, accepted Dec. 2016.
- 22. <u>C. Zhu, X. Li, V.C.M. Leung, L.T. Yang, E. Ngai and L. Shu, "Towards Pricing for Sensor-Cloud", *IEEE Trans. Cloud Computing*, accepted Dec. 2016.</u>
- 23. F.-H. Tseng, Y.-M. Jheng, L.-D. Chou, H.-C. Chao and V.C.M. Leung, "Link-aware Virtual Machine Placement for Cloud Services based on Service-Oriented Architecture", *IEEE Trans. Cloud Computing*, accepted Dec. 2016.
- 24. N. Zhao, X. Liu, F.R. Yu, M. Li and V.C.M. Leung, "Exploiting Adversarial Jamming Signals for Energy Harvesting in Interference Networks", *IEEE Trans. Wireless Communications*, accepted Dec. 2016.
- 25. <u>X. Li, X. Ge, X. Wang</u>, J. Cheng and V.C.M. Leung, "Energy Efficiency Optimization: Joint Antenna-Subcarrier-Power Allocation in OFDM-DASs", *IEEE Trans. Wireless Communications*, vol. 15, no. 11, pp. 7470-7483, Nov. 2016.
- 26. <u>M.Z. Hassan</u>, J. Cheng, M.J. Hossain and V.C.M. Leung, "Effective Capacity of Coherent POLMUX OWC Impaired by Atmospheric Turbulence and Pointing Errors", *IEEE/OSA Journal of Lightwave Technology*, vol. 34, no. 32, pp. 5007-5022, 1 Nov. 2016.
- 27. <u>C. Mahapatra</u>, Z. Sheng, <u>P. Kamalinejad</u>, V.C.M. Leung and S. Mirabbasi, "Optimal Power control in Green Wireless Sensor Networks with Wireless Energy Harvesting, Wake-up Radio and Transmission control", *IEEE Access*, accepted Nov. 2016.
- 28. <u>H. Zhang</u>, Y. Nie, J. Cheng, V.C.M. Leung and A. Nallanathan, "Sensing Time Optimization and Power Control for Energy Efficient Cognitive Small Cell with Imperfect Hybrid Spectrum Sensing", *IEEE Trans. Wireless Communications*, accepted Oct..
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16

May 16, 2017

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Total Number of Publications

Archival Journal Papers	Refereed Conference Papers	Book Titles	Book Chapters	Reports
411	593	12	37	31