

# Curriculum Vitae

## KATE CHING-JU LIN

National Chiao Tung University  
Department of Computer Science  
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### EDUCATION

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Sep 03 – Jun 09 **National Taiwan University** Taipei, Taiwan  
Ph.D. in Institute of Networking and Multimedia  
Sep 99 – Jun 03 **National Tsing Hua University** Hsinchu, Taiwan  
B.S. in Department of Computer Science

### RESEARCH INTERESTS

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Multi-User MIMO and Full-Duplex Systems  
RF-based Sensing and IoT Communications  
Multimedia Networking

### HONORS AND AWARDS

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Project for Excellent Junior Research Investigators, MOST, (國科會優秀年輕研究學者計畫), 2013, 2015, 2017  
ACM MobiSys Best Demo Runner-up, 2017  
Young Scholars' Creativity Award, FAOS (傑出人才發展基金會年輕學者創新獎), 2016  
The 23rd Ten Outstanding Young Women Award (十大傑出女青年), 2015  
Intel Distinguished Collaborative Research Award, 2014  
K. T. Li Young Researcher Award (李國鼎青年研究獎), 2013  
Outstanding Social Youth of Taipei Municipal (台北市社會優秀青年), 2013  
The Exploration Research Award of Pan Wen Yuan Foundation (潘文淵考察研究獎), 2012  
ACM MOBICOM Best Paper Nomination, 2012  
Member of the Phi Tau Phi Scholastic Honor Society (斐陶斐榮譽學會會員), 2009  
Science and Technology Research Scholarship, CTCI Foundation (財團法人中技社科技研究獎學金), 2008  
CyberLink Technical Elite Fellowship (訊連科技菁英獎學金), 2008  
Student Travel Grant from SIGCOMM, 2007  
Scholarship for Graduate Student Study Abroad Program from NSC (國科會千里馬計畫), 2007

### WORK EXPERIENCE

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Aug 16 – present **Department of Computer Science, National Chiao Tung University** Taipei, Taiwan  
Associate Professor  
Jan 14 – Jul 16 **Research Center for IT Innovation, Academia Sinica** Taipei, Taiwan  
Associate Research Fellow  
Jan 10 – Jan 14 **Research Center for IT Innovation, Academia Sinica** Taipei, Taiwan  
Assistant Research Fellow  
Jan 10 – Jan 14 **Institute of Information Science, Academia Sinica** Taipei, Taiwan  
Adjunct Assistant Research Fellow  
May 12 – Jul 12 **Wireless Networking and Communications Group, UT Austin** Austin, TX  
Visiting Scholar (Host: Professor Lili Qiu)  
Jun 11 – Nov 11 **Computer Science and Information Engineering, NTUST** Taipei, Taiwan  
Visiting Scholar  
Sep 10 – Mar 11 **Networks and Mobile Systems Group, CSAIL, MIT** Cambridge, MA  
Visiting Scientist (Host: Professor Dina Katabi)  
Feb 11 – Mar 11 **University of Central Florida** Orlando, FL  
Consultant (Host: Professor Kien A. Hua)  
Jul 09 – Dec 09 **Research Center for IT Innovation, Academia Sinica** Taipei, Taiwan

Mar 07 – Mar 08 **Postdoctoral Fellow**  
**Networks and Mobile Systems Group, CSAIL, MIT** Cambridge, MA  
Visiting Scholar (Host: Professor Dina Katabi)

## RESEARCH PROJECTS

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- Aug 17 – Jul 20 **Remote Home Healthcare using WiFi Signals**  
106-2628-E-009 -004 -MY3, PI
- Aug 15 – Jul 17 **On Enabling Flexible Uplink Network MIMO Clustering**  
MOST 104-2628-E-001-004-MY2, PI
- Jun 15 – May 16 **Performance Enhancement for Wireless Multi-Party Conference Call**  
AWIND Cooperation Project, PI
- May 15 – Mar 16 **Non-Orthogonal Medium Access for Full-Duplex Communications**  
Industrial Technology Research Institute Cooperation Project, PI
- Jan 15 – Dec 17 **Cross-layer Network Designs of 5G Ultra Dense Small-Cell Networks**  
Academia Sinica Thematic Project, AS-104-TP-A05, PI
- Aug 14 – Jul 16 **SDN-enabled Cloud-based Wireless/Broadband Network Technologies & Services**  
MOST University-Industry Collaboration Projects, MOST 103-2622-E-009-012, Co-PI
- Jan 14 – Dec 15 **Next-Generation Collaborative Vehicle Safety System**  
Intel-NTU Connected Context Computing Center, Co-PI
- Aug 14 – Jul 16 **Access Control and Rate Adaptation for Heterogeneous Full-Duplex Wireless Networks**  
MOST 103-2221-E-001-017-MY2, PI
- Aug 13 – Jul 15 **Next Generation Random Access Multi-User MIMO Networks**  
NSC (Outstanding Young Scholar Award) 102-2221-E-001-012-MY2, PI
- May 13 – Apr 14 **Information Delivery Middleware for Disaster Management over Heterogeneous Interwoven Communication Networks**  
NCP 102-2219-E-002-022-, Co-PI
- Mar 13 – Nov 13 **Enhance QoS of FreeRDP-based Cloud Virtual Desktop**  
Institute for Information Industry Cooperation Project, PI
- Mar 12 – Nov 12 **Resolution Adaptation based on Network Quality and Region Importance for Desktop Virtualization**  
Institute for Information Industry Cooperation Project, PI
- Aug 11 – Jul 13 **Content Diffusion over Mobile Social Networks**  
NSC 100-2221-E-001-005-MY2, PI
- Jan 12 – Dec 14 **OpenISDM – Sub-Project 6: Open Information Gateway**  
Academia Sinica Thematic Project, AS-101-TP2-A01, Co-PI
- Mar 10 – Jul 11 **Rate-Adaptive Video Multicast for Heterogeneous Clients over Wireless Networks**  
NSC 99-2218-E-001-005-, PI
- Feb 10 – Dec 10 **Load Balancing for Large Scale Upload Transmission and Processing**  
Institute for Information Industry Cooperation Project, Co-PI

## SELECTED PUBLICATIONS

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1. POLI: Long-Range Visible Light Communications Using Polarized Light Intensity Modulation  
C.-L. Chan, H.-M. Tsai and K. C.-J. Lin  
ACM MobiSys, 2017
2. CELLI: Indoor Positioning using Polarized Sweeping Light Beam  
Y.-L. Wei, C.-J. Huang, H.-M. Tsai and K. C.-J. Lin  
ACM MobiSys, 2017
3. Inter-Client Interference Cancellation for Full-Duplex Networks  
K.-C. Hsu, K. C.-J. Lin and H.-Y. Wei  
IEEE INFOCOM, 2017

4. acPad: Enhancing Channel Utilization for 802.11ac Using Packet Padding  
C.-H. Lin, Y.-T. Chen, K. C.-J. Lin and W.-T. Chen  
IEEE INFOCOM, 2017
5. LiCompass: Extracting Orientation from Polarized Light  
Y.-L. Wei, H.-I. Wu, H.-C. Wang, H.-M. Tsai, K. C.-J. Lin, R. Boubezari, H. L. Minh and Z. Ghassemlooy  
IEEE INFOCOM, 2017
6. Full-Duplex Delay-and-Forward Relaying  
K.-C. Hsu, K. C.-J. Lin and H.-Y. Wei  
ACM MobiHoc, 2016 (*acceptance rate = 18%*)
7. Client as a First-Class Citizen: Practical User-Centric Network MIMO Clustering  
W.-L. Shen, K. C.-J. Lin, M.-S. Chen and K. Tan  
IEEE INFOCOM, April 2016 (*acceptance rate = 18%*)
8. Multiplexing-Diversity Medium Access for Multi-User MIMO Networks  
B.-S. Chen, K. C.-J. Lin, S.-L. Chiu, R. Lee, and H.-Y. Wei  
Accepted by IEEE Transactions on Mobile Computing
9. RollingLight: Enabling Line-of-Sight Light-to-Camera Communications  
H.-Y. Lee, H.-M. Lin, Y.-L. Wei, H.-I. Wu, H.-M. Tsai and K. C.-J. Lin  
ACM MobiSys, 2015 (*acceptance rate = 13.2%*)
10. HybridCast: Joint Multicast-Unicast Design for Multiuser MIMO Networks  
B.-X. Wu, K. C.-J. Lin, K.-C. Hsu and H.-Y. Wei  
IEEE INFOCOM, 2015 (*acceptance rate = 19.2%*)
11. Sieve: Scalable User Grouping for Large MU-MIMO Systems  
W.-L. Shen, K. C.-J. Lin, M.-S. Chen and K. Tan  
IEEE INFOCOM, 2015 (*acceptance rate = 19.2%*)
12. Maximizing Submodular Set Function with Connectivity Constraint: Theory and Application to Networks  
T.-W. Kuo, K. C.-J. Lin and M.-J. Tsai  
IEEE INFOCOM, Apr. 2013 (*acceptance rate = 17.4%*)  
Extension work accepted by ACM/IEEE Transactions on Networking
13. Rate Adaptation for 802.11 Multiuser MIMO Networks  
W.-L. Shen, Y.-C. Tung, K.-C. Lee, K. C.-J. Lin\*, S. Gollakota, D. Katabi and M.-S. Chen  
ACM MOBICOM, 2012 (*acceptance rate = 15.1%, one of three best paper finalists, citation: 55*)  
Extension work in IEEE Transactions on Mobile Computing, vol. 13, no. 1, pp. 37-47, Jan. 2014
14. Preference-Aware Content Dissemination in Opportunistic Mobile Social Networks  
K. C.-J. Lin, C.-W. Chen and C.-F. Chou  
IEEE INFOCOM, Apr. 2012 (*acceptance rate = 18%, citation: 33*)  
Extension work accepted by IEEE Transactions on Parallel and Distributed Systems
15. Random Access Heterogeneous MIMO networks  
K. C.-J. Lin, S. Gollakota and D. Katabi  
ACM SIGCOMM, Aug. 2011 (*acceptance rate: 14.3%, citation: 117*)

## FULL PUBLICATIONS

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### Journal Articles

1. S.-C. Chao, K. C.-J. Lin\* and M.-S. Chen, "Flow Classification for Software-Defined Data Centers Using Stream Mining," Accepted by IEEE Transactions on Services Computing
2. K. C.-J. Lin\*, W.-L. Shen, M.-S. Chen and K. Tan, "User-Centric Network MIMO with Dynamic Clustering," IEEE/ACM Transactions on Networking, vol. 25, no. 3, pp. 1910-1923, Jun. 2017
3. C.-H. Lin, K. C.-J. Lin\* and W.-T. Chen, "Channel-Aware Polling-based MAC Protocol for Body Area Networks: Design and Analysis," IEEE Sensors Journal, vol. 17, no. 9, pp. 2936-2948, May, 2017
4. S.-Y. Chen, T.-F. Huang, K. C.-J. Lin\*, Y.-W. P. Hong and A. Sabharwal, "Probabilistic Medium Access Control for Full-Duplex Networks with Half-Duplex Clients," IEEE Transactions on Wireless

Communications, vol. 16, no. 4, pp. 2627-2640, Apr. 2017

5. S.-L. Chiu, K. C.-J. Lin\*, G.-X. Lin and H.-Y. Wei, "Empowering Device-to-Device Networks with Cross-Link Interference Management," IEEE Transactions on Mobile Computing, vol. 16, no. 4, pp. 950-963, Apr. 2017
6. W.-L. Shen, K. C.-J. Lin\*, W.-J. Cheng, M.-S. Chen, and L. Qiu, "Concurrent Packet Recovery for Distributed Uplink Multiuser MIMO Networks," IEEE Transactions on Mobile Computing, vol. 15, no. 12, pp. 3014-3027, Dec. 2016
7. M.-H. Chen, Y.-C. Tung, S.-H. Hung, K. C.-J. Lin and C.-F. Chou\*, "Availability Is Not Enough: Minimizing Joint Response Time in Peer-Assisted Cloud Storage Systems," IEEE System Journal, vol. 10, no. 4, pp. 1424-1434, Dec. 2016
8. T.-W. Kuo, K. C.-J. Lin and M.-J. Tsai, "On the Construction of Data Aggregation Tree with Minimum Energy Cost in Wireless Sensor Networks: NP-Completeness and Approximation Algorithms," IEEE Transactions on Computers, vol. 65, no. 10, pp. 3109-3121, Oct. 2016 (*citation: 54*)
9. K. C.-J. Lin\*, T.-W. Kuo, P.-J. Yan, W.-J. Cheng and S.-K. Jeng, "Beam Configuration and Client Association for Access Points Using Switched Beam Antennas," IEEE Transactions on Mobile Computing, vol. 15, no. 9, pp. 2179-2192, Sept. 2016
10. B.-S. Chen, K. C.-J. Lin\*, S.-L. Chiu, R. Lee, and H.-Y. Wei, "Multiplexing-Diversity Medium Access for Multi-User MIMO Networks," IEEE Transactions on Mobile Computing, vol. 15, no. 5, pp. 1211-1223, May, 2016
11. C.-C. Hung and K. C.-J. Lin\*, "Joint Sink Deployment and Association for Multi-Sink Wireless Camera Networks," Wireless Communications and Mobile Computing, vol. 16, no.2, pp. 209-222, Feb. 2016
12. H.-H. Cheng and K. C.-J. Lin\*, "Source Selection and Content Dissemination for Preference-Aware Traffic Offloading," IEEE Transactions on Parallel and Distributed Systems, vol. 26, no. 11, pp. 3160-3174, Nov. 2015
13. T.-W. Kuo, K. C.-J. Lin\* and M.-J. Tsai, "Maximizing Submodular Set Function with Connectivity Constraint: Theory and Application to Networks," ACM/IEEE Transactions on Networking, vol. 23, no.2, pp. 533-546, Apr. 2015
14. T.-W. Kuo, K.-C. Lee, K. C.-J. Lin\* and M.-J. Tsai, "Leader-Contention-Based User Matching for 802.11 Multiuser MIMO Networks," IEEE Transactions on Wireless Communications, vol. 13, no. 4, pp. 4389-4400, Aug. 2014 (*citation: 18*)
15. W.-L. Shen, C.-S. Chen, K. C.-J. Lin\* and H. A. Kien, "Autonomous Mobile Mesh Networks," IEEE Transactions on Mobile Computing, Vol. 13, No. 2, pp. 364-376, Feb. 2014 (*citation: 42*)
16. W.-L. Shen, K. C.-J. Lin\*, S. Gollakota and M.-S. Chen, "Rate Adaptation for 802.11 Multiuser MIMO Networks," IEEE Transactions on Mobile Computing, Vol. 13, No. 1, pp. 35-47, Jan. 2014 (fast track for three best paper finalists in MOBICOM'12) (*citation: 90*)
17. K. C.-J. Lin\* and D.-N. Yang, "Multicast with Intra-Flow Network Coding in Multi-Rate Multi-Channel Wireless Mesh Networks," IEEE Transactions on Vehicular Technology, Vol. 62, No. 8, pp. 3913-3927, Oct. 2013
18. C.-C. Hsu, M.-S. Kuo, C.-F. Chou\*, and K. C.-J. Lin, "The Elimination of Spatial-Temporal Uncertainty in Underwater Sensor Networks," IEEE/ACM Transactions on Networking, Vol. 21, No. 4, pp. 1229 - 1242, Aug. 2013
19. C.-C. Hung, K. C.-J. Lin\*, C.-F. Chou and C.-C. Hsu, "EFFORT: Energy-Efficient Opportunistic Routing in Wireless Sensor Networks," Wireless Communications and Mobile Computing, vol. 13, no. 8, pp. 760-773, Jun. 2013
20. K. C.-J. Lin\*, W.-L. Shen, C.-H. Hsu and C.-F. Chou, "Quality-Differentiated Video Multicast in Multi-Rate Wireless Networks," IEEE Transactions on Mobile Computing, vol. 12, no. 1, pp. 21-34, Jan. 2013 (*citation: 27*)
21. K. C.-J. Lin\*, Y.-J. Chuang and D. Katabi, "A Light-Weight Wireless Handshake," ACM Computer Communication Review, vol. 42, no. 2, pp 28-34, Apr. 2012
22. K. C.-J. Lin\*, W.-T. Lin and C.-F. Chou, "Social-Based Content Diffusion in Pocket Switched Networks," IEEE Transactions on Vehicular Technology, vol. 60, no. 9, pp. 4539-4548, Nov. 2010
23. C.-C. Hsu, K. C.-J. Lin, Y.-R. Lai and C.-F. Chou\*, "On Exploiting Spatial-Temporal Uncertainty in Max-min Fairness in Underwater Sensor Networks," IEEE Communications Letters, vol.14, no.12, pp.1098-1100, Dec. 2010
24. K. C.-J. Lin, C.-P. Wang, C.-F. Chou\* and L. Golubchik, "SocioNet: A Social-based Multimedia Access System for Unstructured P2P Networks," IEEE Transactions on Parallel and Distributed Systems, Vol. 21, No. 7, pp 1027-1041, Jul. 2010 (*citation: 50*)
25. K. C.-J. Lin and C.-F. Chou\*, "MR<sup>2</sup>C: Exploiting Multiple Rates to Maximize Throughput for Wireless

Mesh Networks," IEEE Transactions on Wireless Communications, Vol. 8, No. 12, pp 6038-6049, Dec. 2009 (*citation: 19*)

26. K. C.-J. Lin and C.-F. Chou\*, "Cooperative Content Dissemination in Multi-channel WLAN Hotspots," Computer Networks, Vol. 52, No. 3, pp 720-738, Feb. 2008

### Conference Papers

1. T.-W. Huang, Y. Ren, K. C.-J. Lin and Y.-C. Tseng, "r-Hint: A Message-Efficient Random Access Response for mMTC in 5G Networks," IEEE PIMRC, Oct. 2017
2. C.-L. Chan, H.-M. Tsai and K. C.-J. Lin, "POLI: Long-Range Visible Light Communications Using Polarized Light Intensity Modulation," ACM MobiSys, Jun. 2017
3. Y.-L. Wei, C.-J. Huang, H.-M. Tsai and K. C.-J. Lin, "CELLI: Indoor Positioning using Polarized Sweeping Light Beam," ACM MobiSys, Jun. 2017
4. K.-C. Hsu, K. C.-J. Lin and H.-Y. Wei, "Inter-Client Interference Cancellation for Full-Duplex Networks," IEEE INFOCOM, May 2017
5. C.-H. Lin, Y.-T. Chen, K. C.-J. Lin and W.-T. Chen, "acPad: Enhancing Channel Utilization for 802.11ac Using Packet Padding," IEEE INFOCOM, May 2017
6. J.-Y. Chang, K.-Y. Lee, K. C.-J. Lin and W. Hsu, "Location-Independent WiFi Action Recognition via Vision-based Methods," ACM Multimedia (short paper), Oct. 2016
7. K.-C. Hsu, K. C.-J. Lin and H.-Y. Wei, "Full-Duplex Delay-and-Forward Relaying," ACM MobiHoc, Jul. 2016 (**acceptance rate = 18.7%**)
8. Y.-L. Wei, H.-I. Wu, H.-C. Wang, H.-M. Tsai, K. C.-J. Lin, R. Boubezari, H. L. Minh and Z. Ghassemlooy, "LiCompass: Extracting Orientation from Polarized Light," IEEE INFOCOM, Apr. 2016
9. W.-L. Shen, K. C.-J. Lin, M.-S. Chen and K. Tan, "Client as a First-Class Citizen: Practical User-Centric Network MIMO Clustering," IEEE INFOCOM, Apr. 2016 (**acceptance rate = 18.3%**)
10. T.-W. Kuo, B.-H. Liou, K. C.-J. Lin and M.-J. Tsai, "Deploying Chains of Virtual Network Functions: On the Relation between Link and Server Usage," IEEE INFOCOM, Apr. 2016 (**acceptance rate = 18.3%**, *citation: 21*)
11. J.-Y. Chang, K.-Y. Lee, K. C.-J. Lin and W. Hsu, "Wi-Fi Action Recognition via Vision-Based Methods," IEEE ICASSP, Mar. 2016
12. S.-Y. Chen, T.-F. Huang, K. C.-J. Lin, Y.-W. P. Hong and A. Sabharwal, "Probabilistic-based Adaptive Full-Duplex and Half-Duplex Medium Access Control," IEEE GLOBECOM, Dec. 2015
13. T.-C. Chang, C.-H. Lin, K. C.-J. Lin and W.-T. Chen, "Load-Balanced Sensor Grouping for IEEE 802.11 ah Networks," IEEE GLOBECOM, Dec. 2015
14. M. Khan, A. Bhartia, L. Qiu and K. C.-J. Lin, "Smart Retransmission and Rate Adaptation in WiFi," IEEE ICNP, Nov. 2015 (**acceptance rate = 20.3%**)
15. C.-J. Huang, Y.-L. Wei, C. Fu, W.-H. Shen, H.-M. Tsai and K. C.-J. Lin, "LiBeamScanner: Accurate Indoor Positioning with Sweeping Light Beam," ACM Workshop on Visible Light Communication Systems, Sep. 2015
16. Y.-L. Chien, K. C.-J. Lin and M.-S. Chen, "Machine Learning Based Rate Adaptation with Elastic Feature Selection for HTTP Streaming," IEEE ICME, Jun. 2015
17. Y.-C. Hsu, K. C.-J. Lin and W.-T. Chen, "Client-AP Association for Multiuser MIMO Networks," IEEE ICC, Jun. 2015
18. H.-Y. Lee, H.-M. Lin, Y.-L. Wei, H.-I. Wu, H.-M. Tsai and K. C.-J. Lin, "RollingLight: Enabling Line-of-Sight Light-to-Camera Communications," ACM MobiSys, May 2015 (**acceptance rate = 13.2%**, *citation: 42*)
19. B.-X. Wu, K. C.-J. Lin, K.-C. Hsu and H.-Y. Wei, "HybridCast: Joint Multicast-Unicast Design for Multiuser MIMO Networks," IEEE INFOCOM, Apr. 2015 (**acceptance rate = 19.2%**)
20. W.-L. Shen, K. C.-J. Lin, M.-S. Chen and K. Tan, "Sieve: Scalable User Grouping for Large MU-MIMO Systems," IEEE INFOCOM, Apr. 2015 (**acceptance rate = 19.2%**)
21. P.-L. Tsai, K. C.-J. Lin and W.-T. Chen, "Downlink Radio Resource Allocation with Carrier Aggregation in MIMO LTE-Advanced Systems," IEEE ICC, Jun. 2014
22. B.-S. Chen, K. C.-J. Lin and H.-Y. Wei, "Harnessing Receive Diversity in Distributed Multi-User MIMO Networks," ACM SIGCOMM (poster), Aug. 2013
23. W.-L. Shen, K. C.-J. Lin and M.-S. Chen, "An Empirical Study of Analog Channel Feedback," ACM SIGCOMM (poster), Aug. 2013
24. T.-W. Kuo, K. C.-J. Lin and M.-J. Tsai, "Maximizing Submodular Set Function with Connectivity Constraint: Theory and Application to Networks," IEEE INFOCOM, Apr. 2013 (**acceptance rate = 17.4%**,

*citation: 19)*

25. H.-C. Li, K. C.-J. Lin, K.-L. Hua and G.-M. Chiu, "Dependency-Aware Quality-Differentiated Wireless Video Multicast," IEEE WCNC, Apr. 2013
26. C.-C. Hsu, Y.-A. Liang, J. Gomez, C.-F. Chou and K. C.-J. Lin, "Distributed Flexible Channel Assignment in WLANs," IEEE WCNC, Apr. 2013
27. C.-S. Shih, L.-J. Chen, K. C.-J. Lin, and W.-H. Chung, "Open Information Gateway for Disaster Management," IEEE ICC Workshop, Dec. 2012
28. Y.-Y. Chen, C.-C. Hsu, C.-F. Chou and K. C.-J. Lin, "On Detecting Mobile Target with Deadline Constraint in Mobile Sensor Networks," IEEE Sensors, Oct. 2012
29. W.-L. Shen, Y.-C. Tung, K.-C. Lee, K. C.-J. Lin, S. Gollakota, D. Katabi and M.-S. Chen, "Rate Adaptation for 802.11 Multiuser MIMO Networks," ACM MOBICOM, Aug. 2012 (**acceptance rate = 15.1%, citation: 90, best paper nomination**)
30. Y.-J. Chuang and K. C.-J. Lin, "Cellular Traffic Offloading through Community-based Opportunistic Dissemination," IEEE WCNC, Apr. 2012 (**citation: 27**)
31. K. C.-J. Lin, S.-P. Chou and C.-F. Chou, "Video Multicast with Heterogeneous User Interests in Multi-Rate Wireless Networks," IEEE WCNC, Apr. 2012
32. C.-Y. Ku, Y.-D. Lin, Y.-C. Lai, P.-H. Li and K. C.-J. Lin, "Real Traffic Replay over WLAN with Environment Emulation," IEEE WCNC, Apr. 2012
33. K. C.-J. Lin, C.-W. Chen and C.-F. Chou, "Preference-Aware Content Dissemination in Opportunistic Mobile Social Networks," IEEE INFOCOM, Mar. 2012 (**acceptance rate = 18%, citation: 58**)
34. K. C.-J. Lin and S.-T. Lee, "Relay-based Video Multicast with Network Coding in Multi-Rate Wireless Networks," IEEE GLOBECOM, Dec. 2011
35. Y.-C. Tung, K. C.-J. Lin and C.-F. Chou, "Bandwidth-Aware Replica Placement for Peer-to-Peer Storage Systems," IEEE GLOBECOM, Dec. 2011
36. C.-W. Chou and K. C.-J. Lin, "Learning-based Dynamic Channel Selection for Opportunistic Spectrum Access," IEEE Workshop on Recent Advances in Cognitive Communications and Networking (GLOBECOM Workshop), Dec. 2011
37. K. C.-J. Lin, S. Gollakota and D. Katabi, "Random Access Heterogeneous MIMO networks," ACM SIGCOMM, Aug. 2011 (**acceptance rate: 14.3%, citation: 152**)
38. C.-W. Chou, K. C.-J. Lin and T.-H. Lee, "On Efficient Multipolling with Various Service Intervals for IEEE 802.11e WLANs," IEEE IWCMC, Jul. 2011
39. C.-C. Hsu, W.-L. Shen, K. C.-J. Lin and C.-F. Chou, "A Cooperative P2P-based Distribution Platform for User-Centric Content Dissemination," IEEE ICC, Jun. 2011
40. M. C.-C. Hung and K. C.-J. Lin, "Sink Deployment in Wireless Surveillance Systems," IEEE WCNC, Apr. 2011
41. Y.-C. Tung and K. C.-J. Lin, "Location-Assisted Energy-Efficient Content Search for Mobile Peer-to-Peer Networks," IEEE MP2P (PerCom Workshop), Mar. 2011
42. M. C.-C. Hung, K. C.-J. Lin, C.-C. Hsu and C.-F. Chou, "On Enhancing Network-Lifetime Using Opportunistic Routing in Wireless Sensor Networks," International Conference on Computer Communication Networks (ICCCN), Aug. 2010 (**citation: 35**)
43. K. C.-J. Lin, S.-T. Shen and C.-F. Chou, "Rate-Loss based Channel Assignment in Multi-Rate Wireless Mesh Networks," IEEE VTC-Spring, May 2010
44. T.-G. Li, C.-C. Hsu, C.-F. Chou, K. C.-J. Lin, "On Reliable Transmission by Adaptive Network Coding in Wireless Sensor Networks," IEEE ICC, Jun. 2009
45. C.-C. Hsu, K.-F. Lai, C.-F. Chou, and K. C.-J. Lin, "ST-MAC: Spatial-Temporal MAC Scheduling for Underwater Sensor Networks," IEEE INFOCOM, Apr. 2009 (**acceptance rate: 19.7%, citation: 111**)
46. C.-C. Hsu, C.-F. Chou, and K. C.-J. Lin, "Virtual Domain and Coordinate Routing in Wireless Sensor Networks," IEEE WCNC, Apr. 2009
47. K. C.-J. Lin, N. Kushman and D. Katabi, "ZipTx: Harnessing Partial Packets in 802.11 Networks," ACM MobiCom, Sep. 2008 (**acceptance rate: 11.7%, citation: 120**)
48. S. Kandula, K. C.-J. Lin, T. Badrikhanli and D. Katabi, "FatVAP: Aggregating AP Backhaul Capacity to Maximize Throughput," USENIX NSDI, Apr. 2008 (**acceptance rate: 17.7%, citation: 172**)
49. K. C.-J. Lin, S.-H. Lin and C.-F. Chou, "Performance Study of Optimal Routing and Channel Assignment in Wireless Mesh Networks," IEEE GLOBECOM, Nov. 2007
50. K. C.-J. Lin, Yi-Ting Chang, S.-C. Tsai and C.-F. Chou, "Enabling Keyword Search and Similarity Search in Small-World-based P2P Systems," 16th International Conference on Computer Communications and Networks (ICCCN), Aug. 2007
51. C.-J. Lin, Y.-T. Chang, S.-C. Tsai and C.-F. Chou, "Distributed Social-based Overlay Adaptation for

- Unstructured P2P Networks," 10th IEEE Global Internet Symposium (in conjunction with IEEE Infocom'07), May 2007
52. C.-J. Lin and C.-F. Chou, "Route-Aware Load-Balanced Resource Allocation for Wireless Mesh Networks," IEEE WCNC, Mar. 2007
  53. C.-J. Lin, P.-L. Chou and C.-F. Chou, "HCDD: Hierarchical Cluster-based Data Dissemination in Wireless Sensor Networks with Mobile Sink," International Wireless Communications & Mobile Computing Conference (IWCMC), Jul. 2006 (*citation: 105*)
  54. C.-F. Chou, M.-W Hsu, C.-J. Lin, P.-L. Chou and, "A Trend-Loss-Density-based Differential Scheme in Wired-Cum-Wireless Networks," International Wireless Communications & Mobile Computing Conference (IWCMC), Jul. 2006
  55. C.-J. Lin, Y.-H. Ni, H.-P. Suen and C.-F. Chou, "Cooperative Popularity-Aware MPEG-4/MPEG-7 Streaming Proxy System," The Ninth International Symposium on Consumer Electronics (ISCE), Jun. 2005
  56. C.-F. Chou, C.-J. Lin, and C.-C. Tsai, "Traffic-aware Resource Management Schemes in Heterogeneous Wireless Cellular Networks," International Symposium on Heterogeneous Wireless Networks (ISHWN 2005), part of IEEE WIRELESSCOM, Jun. 2005
  57. C.-J. Lin and C.-F. Chou, "Hybrid WLAN for Data Dissemination Applications," 12th IEEE International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS), Oct. 2004

## PROFESSIONAL ACTIVITIES

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Editor	ACM/Springer Wireless Networks (2014-present)
Poster Co-Chair	ACM MobiCom, 2017
Publicity Chair	ACM CellNet Workshop, 2013
Program Committee	ACM SIGCOMM, 2018 ACM HotMobile, 2018 ACM APNet, 2017-2018 IEEE INFOCOM, 2015-2017 IEEE ICNP, 2016-2017 IEEE SECON, 2016-2017 ACM HotWireless, 2017 ACM Workshop on Visible Light Communication Systems, 2014-2017 ACM MOBICOM, 2014, 2016 USENIX NSDI, 2010, 2015-2016 IEEE ICC, 2015-2016 IEEE GLOBECOM, 2015 IEEE ICME, 2011-2015 ACM APNet, 2017 ACM HotWireless, 2016 ACM SIGCOMM Poster/Demo, 2014 ACM CellNet Workshop, 2013-2014 ICNC, 2013-2014 IEEE HPCC, 2013 ACM CoNext Student Workshop, 2012 IEEE CloudCom, 2012 IEEE MP2P, 2012-2013 IEEE PIMRC, 2011
Journal Referee	IEEE Journal on Selected Areas in Communications, 2017 IEEE/ACM Transactions on Networking, 2015-2017 IEEE Transactions on Wireless Communications, 2009-2010, 2013-2014, 2016-2017 IEEE Transactions on Mobile Computing, 2012-2017 IEEE Transactions on Vehicular Technology, 2013-2014, 2016-2017 Elsevier Journal of Computer Communications, 2017

Sensors, 2017  
 IEEE Wireless Communications Magazine, 2015  
 IEEE Transactions on Multimedia, 2015  
 IEEE Transactions on Parallel and Distributed Computing, 2013-2014  
 ACM Transactions on Multimedia Computing Communications and Applications, 2016  
 IEEE Transactions on Communications, 2012  
 IEEE Transactions on Circuits and Systems for Video Technology, 2013-2014  
 IEEE Transaction on Broadcasting, 2010  
 IEEE Communication Letters, 2010, 2013  
 IEEE Sensor Journal, 2013  
 IEEE Communications Magazine, 2009  
 ACM Transactions on Sensor Networks, 2011  
 Wireless Networks, 2012-2017  
 International Journal of Sensor Networks, 2012  
 International Journal of Communication Systems, 2013  
 Elsevier Ad Hoc Networks, 2010, 2015  
 Elsevier Journal of Parallel and Distributed Computing, 2011-2012  
 Journal of Visual Communication and Image Representation, 2012  
 Service Oriented Computing and Applications, 2010

Conference Referee     IEEE INFOCOM (2012-2017), IEEE GLOBECOM (2007-2009, 2013, 2015-2017), IEEE ICC (2012, 2014-2015), IEEE WCNC (2007, 2015-2017), ACM UBICOMP (2014), IEEE ICME (2011-2016), IEEE SPAWC (2013), IEEE ICCCN (2015), IEEE CloudCom (2012), IEEE PIMRC (2011), IEEE VTC (2010-2012), ICNC (2013-2015), ACM Multimedia (2010), IFIP Networking (2007)

## INVITED TALKS

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### **From Multi-User MIMO to Network MIMO**

2017.03.15     Department of Computer Science, National Central University

### **MobileHCI Using Wireless Signals: Applications and Designs**

2016.10.26     Institute of Systems and Applications, National Tsing Hua University

### **Full-Duplex Delay-and-Forward Relaying**

2016.10.05     Electrical Engineering, National Central University

### **Autonomous Mobile Drone Mesh Networks**

2016.06.25     Keynote speech, ACM DroNet Workshop (co-located with ACM MobiSys'16)

### **Flexible Clustering for Network Multiuser MIMO Systems**

2016.05.19     Computer Science, Tamkang University

### **Cross-Layer Design for Multiuser MIMO Networks: From Rate Adaptation to User Selection**

2015.11.26     Computer Science and Engineering, National Taiwan Ocean University

### **Joint Multicast-Unicast Design for Multiuser MIMO Networks**

2015.04.24     Computer Science and Engineering, Hong Kong University of Science & Technology

### **Rate Adaptation and User Selection for Multiuser MIMO Networks**

2014.10.21     Institute of Communications Engineering, National Sun Yat-Sen University

### **Random Access and Rate Adaptation for Heterogeneous Multiuser MIMO Networks**

2013.12.05     Computer and Communication Engineering, National Cheng Kung University  
 2013.12.12     Computer Science and Engineering, National Taiwan Ocean University

### **Random Access Heterogeneous MIMO**

2013.05.22     Communication Engineering, I-Shou University



2013.03.01            Communications Engineering, National Tsing Hua University  
2012.12.26            Computer Science and Information Engineering, National Taiwan Normal University  
2012.08.17            2012 Fall Workshop on Information Theory and Communications  
2011.10.28            Computer Science and Information Engineering, National Taiwan University  
2011.10.17            Communication Engineering, National Taiwan University  
2011.10.14            Electrical Engineering, National Chung-Hsing University

**Quality-Differentiated Wireless Video Multicasting**

2011.06.02            Computer Science and Information Engineering, National Chia-Yi University  
2011.05.02            Computer Science, National Taiwan University of Science and Technology  
2011.04.27            Communication Engineering, National Chiao-Tung University  
2010.09.16            Computer Science, National Cheng-Chi University

**Harnessing Partial Packets in 802.11 Networks**

2010.12.06            Electrical Engineering, Electrical Engineering, National Taiwan University  
2008.08.08            Institute of Information Science, Academia Sinica