

Dr. Chunyi Peng

(Updated in January 2, 2017)

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RESEARCH INTERESTS

- Mobile networks (5G/4G/3G)
- wireless networks and wireless communication
- Mobile sensing and mobile systems
- Network and system security

EDUCATION

09/2013 PH.D. IN COMPUTER SCIENCE, University of California, Los Angeles
06/2012 M.S. IN COMPUTER SCIENCE, University of California, Los Angeles
01/2005 M.E. IN AUTOMATION (highest honors), Tsinghua University
06/2002 B.E. IN AUTOMATION (highest honors), Tsinghua University

WORK EXPERIENCE

09/2013 – ASSISTANT PROFESSOR, The Ohio State University
2009 – 2013 GRADUATE RESEARCH ASSISTANT, University of California, Los Angeles
2013 RESEARCH INTERN, Microsoft Research Redmond (3 months)
2012 RESEARCH INTERN, IBM TJ Watson Research Center (3 months)
2011 RESEARCH INTERN, IBM TJ Watson Research Center (3 months)
2005 – 2009 ASSOCIATE/ASSISTANT RESEARCHER, Microsoft Research Asia
2002 – 2005 GRADUATE RESEARCH ASSISTANT, Tsinghua University

RESEARCH GRANTS AND GIFTS (mine: \$1,015,561, total: \$2,011, 014)

- Gift from *Adobe Systems, Inc*, \$27,000, 11/2015-08/2016.
- Configuration Management for Mobility Support in Cellular Networks, *National Science Foundation (NSF)*, *CNS-1526456*, \$230,212 (total: \$459,990), 10/01/2015 – 09/30/2018.
- Cellular Network Services in Peril: A Perspective on Control-Plane and Data-Plane Design, *National Science Foundation (NSF)*, *CNS-1527613*, \$238,437 (total: \$499,378), 09/01/2015 – 08/31/2018.
- Gift from *Adobe Systems, Inc*, \$28,750, 12/2014-08/2015.
- Secure Data Charging Architecture for Mobile Devices in 3G/4G Cellular Networks: Vulnerabilities and Solutions, *National Science Foundation (NSF)*, *CNS-1421933*, \$245,581 (total: \$497,948), 07/01/2014 – 06/30/2017.
- Identifying Design and Operational Loopholes in Cellular Network Protocols, *National Science Foundation (NSF)*, *CNS-1421440*, \$245,581 (total: \$497,948), 10/01/2014 – 09/30/2017.

HONORS AND AWARDS

- Best Community Paper Award at MobiCom'16, 2016.

- Finalist for Qualcomm Innovation Fellowship, 2015
- N2Women Fellowship, 2015.
- Northrup-Grumman Outstanding Graduate Student Award of UCLA, 2013.
- IBM Ph.D. Fellowship Award, 2012.
- Chinese Government Award for Outstanding Self-Financed Students Abroad, 2012.
- UCLA Fellowship with the Chancellor's Prize, 2009, 2010.
- Best Demo Awards at MobiSys'09 (Point2Share), 2009.
- Best Demo Award at SenSys'07 (BeepBeep), 2007.
- Best Demo Award at Mobisys'07 (MobiUS), 2007.
- Best Master Thesis Award at Tsinghua University, 2005.
- Graduated with Highest Honors of Tsinghua University, 2005.
- Best Undergraduate Student Award of Beijing, China, 2002.
- Graduated with Highest Honors of Tsinghua University, 2002.

TEACHING

- **2017 Spring:** *CSE3461/5461*: Computer Networking and Internet Technologies (undergraduate and graduate-level, 80 enrollments)
- **2015 Fall:** *CSE3461/5461*: Computer Networking and Internet Technologies (undergraduate and graduate-level, 41 enrollments)
- **2015 Fall:** *CSE5469*: Advanced Topics on Cellular Networks (graduate-level, 18 enrollments)
- **2014 Fall:** *CSE3461/5461*: Computer Networking and Internet Technologies (undergraduate and graduate-level, 80 enrollments)
- **2014 Spring:** *CSE3461/5461*: Computer Networking and Internet Technologies (undergraduate and graduate-level, 42 enrollments)
- **2014 Spring:** *CSE5469*: Advanced Topics on Mobile Networking and Systems (graduate-level)

STUDENT ADVISING

- **Ph.D. Students**
 - Haotian Deng
 - Kun Jin
 - Xingya Zhao
 - Qiang Zhai (Co-advised by Prof. Dong Xuan)
- **Master and Undergraduate Students**
 - Junwei Xu (MS, ECE OSU, Co-advised by Prof. Wladimiro Villarroel, since 09/2016)
- **Visting Students**
 - Jiahua Chen (Peking University, MS, 09/2015-12/2015)
 - Jingyu Zhang (Shanghai Jiaotong University, PhD, 08/2014-01/2016)
- **MSSN Alumni**
 - Sreeram Sreethar Babu (MS, 01/2014 – 07/2014)
 - Gan Fang (Undergraduate, 09/2014 - 05/2016, now at Northwestern)
 - Di Li (Undergraduate, 09/2015-12/2015)
 - Zhuoran Li (08/2014 - 04/2016)
 - Ryan Van Soelen (Undergraduate, 01/2015-10/2015)

- Jiaqi Xu (08/2014 - 08/2016)
- Li Zhang (undergraduate, 05/2014 – 08/2014, UCLA MS)
- Jie Zhao (08/2014 - 04/2016)

I am also very lucky to work with several talented non-OSU students in the past years: Pan Hu (Wuhan Univ, China, now at Stanford), Anran Wang (BS/MS, BUAA, China, now at University of Washington), Li Li (PhD, Tsinghua), Qingyang Xiao (MS, Tsinghua), Yang Zhe (MS, SJTU), Siyu Zhu (MS, SJTU), Guan-Hua Tu (PhD, UCLA, now at MSU), Yuanjie Li (PhD, UCLA), Zengwen Yuan (PhD, UCLA) et. al.

PROFESSIONAL ACTIVITIES

Technical Program Committee Co-Chair

- **VLCS**, ACM Workshop on Visible Light Communication Systems, 2015

Technical Program Committee Member

- **2017**: MobiCom, MobiSys, HotMobile, WWW, INFOCOM, SECON, NDSS, CNS, PAC, ICCCN, WCNC
- **2016**: MobiCom, HotMobile, ICNP, INFOCOM, VLCS, WiNTech
- **2015**: MobiCom, MobiSys, ICNP, SECON, VLCS, All Things Cellular
- **2014**: MobiSys, VLCS, All Things Cellular, MCS, ICC Green Track,
- **2013**: ICC Green Track, Globecom Green Track, ACM S3 workshop
- **2012**: Globecom Green Track,

Conference Organization Committee Member

- Poster/demo chair for MobiSys'17.
- Publicity Co-Chair for International Conference on Mobile Ad-hoc and Sensor Networks (MSN), 2016.

NSF Panelist, 2015, 2016

Panelist for

- Workshop on All Things Cellular (previously CellNet), 2014
- S3 Workshop: Wireless of the Students, by the Students, for the Students, 2014.

Reviewer for

- IEEE/ACM Transactions on Networking(TON), since 2010.
- IEEE Transactions on Mobile Computing(TMC), since 2011.
- ACM Wireless Networks (WINET), since 2011.
- IEEE Journal on Selected Areas in Communications (JSAC), 2012.
- IEEE Transactions on Wireless Communications, 2012.
- IEEE Transactions on Parallel and Distributed Systems (TPDS), 2012.
- IEEE Network Magazine, 2012.
- IEEE Transactions on Services Computing, 2012.
- EURASIP Journal on Wireless Communications and Networking Research, 2012.
- International Journal of Distributed Sensor Networks, 2010.

External Reviewer for

- CHI, 2016
- UbiComp, 2014, 2016
- IEEE Conference on Computer Communications (INFOCOM), 2013.
- Conference on Indoor Positioning and Indoor Navigation, 2010.

SERVICES at OSU

- Faculty Search Committee, Dept. of Computer and Science Engineering, 08/2016 - present.
- Curriculum Committee, Dept. of Computer and Science Engineering, 08/2016 - present.
- Graduate Studies Committee, Dept. of Computer and Science Engineering, 08/2015 - present.
- Graduate Admission Committee, Dept. of Computer and Science Engineering, 08/2013 - 05/2016.
- Faculty Judge, the 10th Annual CSE Grad Poster Exhibition, 2014, 2016.

SERVICES for Women

- Mentor for N2Women Fellowship for MobiCom'16
- Panelist, CSE Research for Society of Women Engineers at OSU (ACM-W event)

Talks

- Dec 2016 **MobileInsight: Bring Cellular Network Intelligence to Smart Mobile Ends**, *Shanghai Jiaotong University, China., Shanghai, China.*
- Dec 2016 **Harness End Intelligence at Mobile Devices in Cellular Networks**, *University of Science and Technology of China, Beijing, China.*
- Dec 2016 **Harness Device Intelligence in the Coming 5G Era**, *Beijing University of Posts and Telecommunications, Beijing, China.*
- Dec 2016 **My “Biased” Introduction to Cellular Networks: Basic Ideas and Thought Out of the Box**, *Tsinghua University, Beijing, China.*
- Sep 2016 **A Security Perspective on VoLTE: Our Untold Research Story and Lessons**, Invited by GSMA (GSM Association), Toronto, Canada
- Dec 2015 **Emerging Security Threats Against 4G LTE Cellular Networks: VoLTE as A Case Study and Beyond**, *Beijing University of Posts and Telecommunications, China.*
- Dec 2015 **On “Internet” of Things: An Architectural Perspective from Mobile Networks**, Keynote at 10th ACM International Workshop on IoT and Cloud Computing, Wuxi, China.
- Dec 2015 **Emerging Security Threats Against 4G LTE Cellular Networks: VoLTE as A Case Study and Beyond**, *Shanghai Jiaotong University, China.*
- April 2015 **Mobile Networks: Yesterday, Today and Tomorrow, The Power and the Peril of Network Evolution**, *Shanghai Jiaotong University, China.*
- Jan 2015 **Explore Problematic Design and Operations in Real 4G/3G Networks**, *China Mobile Research (US).*
- Oct 2014 **Untold Story in Control-Plane Protocol Interactions in 4G/3G Networks**, *Faculty Talk at The Ohio State University.*
- April 2013 **Explore Limitations of Cellular Infrastructure for Mobile Data**, *Microsoft Research Asia, China.*
- April 2013 **Network Support for Mobile Devices and Apps: Infrastructure Limitations & Solutions**, *University of Illinois Urbana-Champaign.*
- April 2013 **Network Support for Mobile Devices and Apps: Infrastructure Limitations & Solutions**, *Tsinghua University, China.*
- March 2013 **Network Support for Mobile Devices and Apps: Infrastructure Limitations & Solutions**, *The Ohio State University.*
- March 2013 **Network Support for Mobile Devices and Apps: Infrastructure Limitations & Solutions**, *University of California, Riverside.*

Selected Press Coverage

- Oct. 2015 *TheVerge*: Researchers discover new attacks amid VoLTE rollout.
 Oct. 2015 *RCRWirelessNews*: Researchers hack VoLTE, get free data.
 Sep. 2012 *MIT Technology Review*: How Your Wireless Carrier Overcharges You.
 Sep. 2012 *Market Place*: Phone Companies Could Be Overcharging You for Data.
 Sep. 2012 *Computer World*: UCLA study documents wireless data overcharges.
 Sep. 2012 *the Fiscal Time: Study*: What Smartphone Users Don't Know about Their Bill.
 Sep. 2012 *TheVerge*: Your carrier may be charging you for data you didn't receive.

PUBLICATIONS

Google Scholar at <http://scholar.google.com/citations?user=7QF1eF4AAAAJ>

H-INDEX: 18, CITATIONS: 2266

Referred Conference and Workshop Papers

- INFOCOM'17 [1] "**NaviLight: Indoor Localization and Navigation Under Arbitrary Lights**", Zenghua Zhao, Jiankun Wang, Xingya Zhao, Chunyi Peng, Qian Guo, Bin Wu, (*INFOCOM'17*), Atlanta, GA, USA, May 2017. (acceptance rate: $292/1395= 20.9\%$)
- INFOCOM'17 [2] "**TUM: Towards Ubiquitous Multi-Device Localization for Cross-Device Interaction**", Han Xu, Zheng Yang, Zimu Zhou, Ke Yi, Chunyi Peng, (*INFOCOM'17*), Atlanta, GA, USA, May 2017. (acceptance rate: $292/1395= 20.9\%$)
- CCS'16 [3] "**New Security Threats Caused by IMS-based SMS Service in 4G LTE Networks**", Guan-Hua Tu, Chi-Yu Li, Chunyi Peng, Yuanjie Li and Songwu Lu, Proceedings of the 22nd ACM Conference on Computer and Communications Security (*CCS'16*), Vienna, Austria, Oct. 2016. (acceptance rate: $137/831= 16.5\%$)
- Hotwireless'16 [4] "**CAP on Mobility Control for 4G LTE Networks (Invited Paper)**", Yuanjie Li, Zengwen Yuan, Chunyi Peng and Songwu Lu, Proceedings of the 3rd ACM Workshop on Hot Topics in Wireless(*HotWireless'16*), New York, USA, Oct. 2016.
- MobiCom'16 [5] "**MobileInsight: Extracting and Analyzing Cellular Network Information on Smartphones**", Yuanjie Li, Chunyi Peng, Zengwen Yuan, Jiayao Li, Haotian Deng and Tao Wang, Proceedings of the 22nd Annual International Conference on Mobile Computing and Networking (*MobiCom'16*), New York, USA, Oct. 2016. (acceptance rate: $32/226 = 14.2\%$).
Best Community Paper Award.
- UbiComp'16 [6] "**ARTcode: Preserve Art and Code In Any Image**", Zhe Yang, Yuting Bao, Chuhao Luo, Xingya Zhao, Siyu Zhu, Chunyi Peng, Yunxin Liu and Xinbing Wang, Proceedings of the 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing (*UbiComp'16*), Heidelberg, Germany, Sep. 2016.
- [7] "**Demystify Undesired Handoff in Cellular Networks**", Chunyi Peng and Yuanjie Li, Proceedings of the 25th International Conference on Computer Communication and Networks(*ICCCN'16*), Waikoloa, Hawaii, Aug. 2016.
- SIGMETRICS'16 [8] "**Instability in Distributed Mobility Management: Revisiting Configuration Management in 3G/4G Mobile Networks**", Yuanjie Li, Haotian Deng, Jiayao Li, Chunyi Peng and Songwu Lu, Proceedings of ACM Sigmetrics (*SIGMETRICS '16*), Antibes Juan-Les-Pins, France, June 2016. (acceptance rate: $28/208= 13.5\%$).
- [9] "**How video streaming consumes power in 4G LTE networks**", Jingyu Zhang, Gan Fang, Minyi Guo and Chunyi Peng, Proceedings of IEEE 17th International Symposium on A World of Wireless, Mobile and Multimedia Networks(*WoWMoM'16*), Coimbra, Portugal, June 2016.
- [10] "**Profiling Energy Consumption of DASH Video Streaming over 4G LTE Networks**", Jingyu Zhang, Gan Fang, Chunyi Peng, Minyi Guo, Sheng Wei and Viswanathan Swaminathan, Proceedings of the 8th International Workshop on Mobile Video(*MoVid'16*), Klagenfurt, Austria, May 2016.

- NSDI'16 [11] **"iCellular: Device-Customized Cellular Network Access on Commodity Smartphones"**, Yuanjie Li, Haotian Deng, Chunyi Peng, Zengwen Yuan, Guan-Hua Tu, Jiayao Li and Songwu Lu, Proceedings of the 13th USENIX Symposium on Networked Systems Design and Implementation (*NSDI'16*), Santa Clara, CA, March 2016. (**acceptance rate: 45/228=19.7%**).
- INFOCOM'16 [12] **"Understanding and Diagnosing Real-World Femtocell Performance Problems"**, Chunyi Peng, Yuanjie Li, Zhuoran Li, Jie Zhao and Jiaqi Xu, Proceedings of IEEE International Conference on Computer Communications (*INFOCOM'16*), San Francisco, CA, April 2016.
- HotMobile'16 [13] **"A First Look at Unstable Mobility Management in Cellular Networks"**, Yuanjie Li, Jiaqi Xu, Chunyi Peng and Songwu Lu, Proceedings of the 17th International Workshop on Mobile Computing Systems and Applications (*HotMobile'16*), Florida, Feb 2016.
- HotMobile'16 [14] **"VoLTE*: A Lightweight Voice Solution to 4G LTE Networks"**, Guan-Hua Tu, Chi-Yu Li, Chunyi Peng, Zenwen Yuan, Yuanjie Li, Xiaohu Zhao and Songwu Lu, Proceedings of the 17th International Workshop on Mobile Computing Systems and Applications (*HotMobile'16*), Florida, Feb 2016.
- CCS'15 [15] **"Insecurity of Voice Solution VoLTE in LTE Mobile Networks"**, Chiyu Li, Guanhua Tu, Chunyi Peng, Zengwen Yuan, Yuanjie Li, Songwu Lu, Xinbing Wang, Proceedings of the 21st ACM Conference on Computer and Communications Security (*CCS'15*), Denver, Colorado, Oct. 2015. (**acceptance rate: 128/646= 19.8%**).
- CNS'15 [16] **"How Voice Call Technology Poses Security Threats in 4G LTE Networks"**, Guanhua Tu, Chiyu Li, Chunyi Peng, Songwu Lu Proceedings of the IEEE Conference on Communications and Network Security(*CNS'15*), Florence, Italy, Sep. 2015. (**acceptance rate: 48/171= 28.1%**).
- MobiSys'15 [17] **"InFrame++: Achieve Simultaneous Screen-Human Viewing and Hidden Screen-Camera Communication"**, Anran Wang, Zhuoran Li, Chunyi Peng, Guobin Shen, Gan Fang, Bin Zeng, Proceedings of the 13th International Conference on Mobile Systems, Applications and Service (*MobiSys'15*), Florence Italy, May 2015 (**acceptance rate: 29/219 = 13.2%**).
- INFOCOM'15 [18] **"Latency-Aware Rate Adaptation in 802.11n Home Networks"**, Chi-Yu Li, Chunyi Peng, Songwu Lu, Xinbing Wang and Ranveer Chandra, Proceedings of the IEEE Conference on Computer Communications (*INFOCOM'15*), Hong Kong, China, April, 2015 (**acceptance rate: 316/1640 = 19.3%**).
- INFOCOM'15 [19] **"A Measurement Study on TCP Behaviors in HSPA+ Networks on High-speed Rails"**, Li Li, Ke Xu, Dan Wang, Chunyi Peng, Qingyang Xiao and Rashid Mijumbi, Proceedings of the IEEE Conference on Computer Communications (*IEEE INFOCOM'15*), Hong Kong, China, April, 2015 (**acceptance rate: 316/1640 = 19.3%**).
- HotNets'14 [20] **"InFrame: Multiflexing Full-Frame Visible Communication Channel for Humans and Devices"**, Anran Wang, Chunyi Peng, Ouyang Zhang, Guobin Shen, and Bing Zeng, Proceedings of the 13th ACM Workshop on Hot Topics in Networks (*HotNets-XIII*), Los Angeles, CA, Nov. 2014 (**acceptance rate: 26/118 = 22.0%**).
- CCS'14 [21] **"Real Threats to Your Data Bills: Security Loopholes and Defense in Mobile Data Charging"**, Chunyi Peng, Chiyu Li, Hongyi Wang, Guanhua Tu and Songwu Lu, Proceedings of the 21st ACM Conference on Computer and Communications Security (*CCS'14*), Scottsdale, Arizona, Nov. 2014 (**acceptance rate: 114/585 = 19.5%**).
- MobiCom'14 [22] **"Enhancing Reliability to Boost the Throughput over Screen-Camera Links"**, Anran Wang, Shuai Ma, Chunming Hu, Jinpeng Huai, Chunyi Peng and Guobin Shen, Proceedings of the 20th Annual International Conference on Mobile Computing and Networking (*MobiCom'14*), Maui, Hawaii, Sep. 2014 (**acceptance rate: 36/220 = 16.4%**).
- SIGCOMM'14 [23] **"Control-Plane Protocol Interactions in Cellular Networks"**, Guanhua Tu, Yuanjie Li, Chunyi Peng, Chiyu Li, Hongyi Wang, Songwu Lu, Proceedings of the ACM SIGCOMM Conference (*SIGCOMM'14*), Chicago, IL, August 2014. (**acceptance rate: 45/237 = 19.0%**).
- Mobisys'14 [24] **"Ubiquitous Keyboard for Small Mobile Devices: Harnessing Multipath Fading for Fine-Grained Keystroke Localization"**, Junjue Wang, Kaichen Zhao, Xinyu Zhang, Chunyi Peng, Proceedings of the 12th International Conference on Mobile Systems, Applications and Service (*MobiSys'14*), Bretton Woods, NH, June 2014 (**acceptance rate: 25/221 = 11.3%**).
- NSDI'14 [25] **"Epsilon: A Visible Light Based Positioning System"**, Liqun Li, Pan Hu, Chunyi Peng, Guobin Shen, Feng Zhao, Proceedings of the 11th USENIX Symposium on Networked Systems Design and Implementation (*NSDI'14*), Seattle, WA, April 2014 (**acceptance rate: 38/223 = 17.0%**).

- LANMAN'14 [26] **"Hidden Costs of Mobile Data Access in Cellular Networks"**, Zehui Li, Chunyi Peng, Yunxin Liu, LANMAN'14, Reno, NV, USA, May 2014 (Invited Paper).
- HotNets'13 [27] **"Pharos: Enable Physical Analytics through Visible Light based Indoor Localization"**, Pan Hu, Liqun Li, Chunyi Peng, Guobin Shen, Feng Zhao, Proceedings of the 12th ACM Workshop on Hot Topics in Networks (*HotNets-XII*), College Park, MD, Nov. 2013 (**acceptance rate: 26/110 = 23.6%**).
- ICNP'13 [28] **"CMES: Collaborative Energy Save for MIMO 802.11 Wireless Networks"**, Ioannis Pefkianakis, Chiyu Li, Chunyi Peng, Suk-Bok Lee, Songwu Lu, Proceedings of the 21st IEEE International Conference on Network Protocols (*ICNP'13*), Gottingen, Germany, Oct. 2013. (**acceptance rate: 46/251 = 18.3%**).
- MobiCom'13 [29] **"How Voice Calls Affect Data in Operational LTE Networks"**, Guanhua Tu, Chunyi Peng, Hongyi Wang, Chiyu Li, Songwu Lu, Proceedings of the 19th Annual International Conference on Mobile Computing and Networking (*MobiCom'13*), Miami, FL, USA, Sep. 2013 (**acceptance rate: 28/208 = 13.5%**).
- MobiSys'13 [30] **"Accounting for Roaming Users on Mobile Data Access: Issues and Root Causes"**, Guanhua Tu, Chunyi Peng, Chiyu Li, Xingyu Ma, Hongyi Wang, Tao Wang, Songwu Lu, Proceedings of the 11th International Conference on Mobile Systems, Applications and Service (*MobiSys'13*), Taipei, Taiwan, June 2013 (**acceptance rate: 33/210 = 15.7%**).
- CCS'12 [31] **"Mobile Data Charging: New Attacks and Countermeasures"**, Chunyi Peng, Chiyu Li, Guanhua Tu, Songwu Lu, Lixia Zhang, Proceedings of the 19th ACM Conference on Computer and Communications Security (*CCS'12*), Raleigh, NC, USA, Oct. 2012. (**acceptance rate: 80/423 = 18.9%**).
- MobiCom'12 [32] **"Can We Pay for What We Get in 3G Data Access?"**, Chunyi Peng, Guanhua Tu, Chiyu Li, Songwu Lu, Proceedings of the 18th Annual International Conference on Mobile Computing and Networking (*MobiCom'12*), Istanbul, Turkey, Aug. 2012 (**acceptance rate: 32/212 = 15.1%**).
- MobiCom'12 [33] **"EERA: Energy-Efficient Rate Adaptation for 802.11n Devices"**, Chiyu Li, Chunyi Peng, Songwu Lu, Xingbin Wang, Proceedings of the 18th Annual International Conference on Mobile Computing and Networking (*MobiCom'12*), Istanbul, Turkey, Aug. 2012. (**acceptance rate: 32/212 = 15.1%**).
- INFOCOM'12 [34] **"VDN: Virtual Machine Image Distribution Network for Cloud Data Centers"**, Chunyi Peng, Minkyong Kim, Zhe Zhang, Hui Lei, Proceedings of the 31st Annual IEEE International Conference on Computer Communications (*INFOCOM'12*), Orlando, Florida USA, March 2012. (**acceptance rate: 278/1547 = 18%**).
- Middleware'11 [35] **"An Empirical Analysis of Similarity in Virtual Machine Images"**, K. R. Jayaram, Chunyi Peng, Zhe Zhang, Minkyong Kim, Han Chen, Hui Lei, Proceedings of the 12th International Middleware Conference (*Middleware'11*) (Industry Track), Lisboa, Portugal, Dec. 2011.
- AINTEC'11 [36] **"Measuring redundancy level on the Web"**, Alexander Afanasyev, Jiangzhe Wang, Chunyi Peng, Lixia Zhang, Proceedings of the 7th Asian Internet Engineering Conference (*AINTEC'11*), Bangkok, Thailand, Nov. 2011.
- MobiCom'11 [37] **"Traffic-Driven Power Saving in Operational 3G Networks"**, Chunyi Peng, Suk-Bok Lee, Songwu Lu, Haiyun Luo and Hewu Li, Proceedings of the 17th Annual International Conference on Mobile Computing and Networking (*MobiCom'11*), Las Vegas, Nevada USA, Sep. 2011 (**acceptance rate: 29/214 = 13.5%**).
- AINTEC'10 [38] **"Implementing Instant Messaging Using Named Data"**, Jiangzhe Wang, Chunyi Peng, Chiyu Li, Eric Osterweil, Ryuji Wakikawa, Pei-chun Cheng, Lixia Zhang, Proceedings of the 6th Asian Internet Engineering Conference (*AINTEC'10*), Bangkok, Thailand, Nov. 2010.
- MobiCom'09 [39] **"A Scalable Micro Wireless Interconnect Structure for CMPs"**, Suk-Bok Lee, Sai-Wang Tam, Ioannis Pefkianakis, Songwu Lu, Mau-Chung Chang, Chuanxiong Guo, Glenn Reinman, Chunyi Peng, Mishali Naik, Lixia Zhang and Jason Cong, Proceedings of the 15th Annual International Conference on Mobile Computing and Networking (*MobiCom'09*), Beijing, China, Sep. 2009. (**acceptance rate: 30/282 = 10.6%**).
- MobiSys'09 [40] **"Point&Connect: Intention-based Device Pairing for Mobile Phone Users"**, Chunyi Peng, Guobin Shen, Yongguang Zhang and Songwu Lu, Proceedings of the 7th Annual International Conference on Mobile Systems, Applications and Services (*MobiSys'09*), Krakow, Poland, June 2009 (**acceptance rate: 26/128 = 20.3%**).

- ICASSP'08 [41] **"A Weighted Subspace Approach for Improving Bagging Performance"**, Qutang Cai, Chunyi Peng and Changshui Zhang, Proceedings of the 33rd International Conference on Acoustic, Speech, and Signal Processing (*ICASSP'08*), Las Vegas, Nevada USA, Apr. 2008.
- SenSys'07 [42] **"BeepBeep: A High Accuracy Acoustic Ranging System using COTS Mobile Devices"**, Chunyi Peng, Guobin Shen, Yongguang Zhang, Yanlin Li and Kun Tan, Proceedings of the 5th ACM Conference on Embedded Networked Sensor Systems (*SenSys'07*), Sydney, Australia, 2007 (acceptance rate: 25/149 = 16.8%).
- ICASSP'07 [43] **"Anaylsis of Max-Min Eigenvalue of Constrained Linear Combinations of Symmetric Matrices"**, Qutang Cai, Chunyi Peng, Changshui Zhang, Proceedings of the 32nd International Conference on Acoustic, Speech, and Signal Processing (*ICASSP'07*), Honolulu, Hawaii USA, Apr. 2007.
- HotWeb'06 [44] **"Measurement and Modeling of A Web-based Question Answering System"**, Chunyi Peng, Zaoyang Gong, Guobin Shen, Proceedings of the 1st IEEE Workshop on Web Systems and Implementation (*HotWeb'06*), Boston, Massachusetts USA, 2006.
- IJCNN'05 [45] **"Learning probability density functions from marginal distributions with applications to Gaussian mixtures"**, Qutang Cai, Changshui Zhang, Chunyi Peng, Proceedings of IEEE International Joint Conference on Neural Networks (*IJCNN'05*), July 2005.
- ISNN'05 [46] **"A Block-Adaptive Subspace Method Using Oblique Projections for Blind Separation of Convolutive Mixtures"**, Chunyi Peng, Xianda Zhang, Qutang Cai, Proceedings of the 2rd International Symposium on Neural Networks (*ISNN'05*), Chongqing, China, May 2005.
- ICC'05 [47] **"Collaboration and Fairness in Opportunistic Spectrum Access"**, Haitao Zheng, Chunyi Peng, Proceedings of the IEEE International Conference on Communications (*ICC'05*), Seoul, Korea, May 2005.

Journal Papers

- [48] **"Impacts of Social Relationships and Inhomogeneous Node Distribution on the Network Performance"**, Kechen Zheng, Jinbei Zhang, Shuochao Yao, Weijie Wu, Xinbing Wang, Chunyi Peng, IEEE Transactions on Wireless Communication, to appear.
- TMC'16 [49] **"An Energy Efficiency Perspective on Rate Adaptation for 802.11n NIC"**, Chi-Yu Li, Chunyi Peng, Peng Cheng, Songwu Lu, Xinbing Wang, Fengyuan Ren, and Tao Wang IEEE Transactions on Mobile Computing (TMC), Vol. 15, No. 6, pp: 1333-1347, Jun 2016.
- TON'16 [50] **"Detecting Problematic Control-Plane Protocol Interactions in Mobile Networks"**, Guan-Hua Tu, Yuanjie Li, Chunyi Peng, Chiyu Li, Songwu Lu, IEEE Transactions on Networking (TON), Vol. 24, No. 2, pp: 1209-1222, April 2016.
- TMC'14 [51] **"GreenBSN: Enabling Energy-Proportional Cellular Base Station Networks "**, Chunyi Peng, Suk-Bok Lee, Songwu Lu, Haiyun Luo, IEEE Transactions on Mobile Computing (TMC), Vol. 13, No. 11, pp: 2537 - 2551, Nov 2014.
- MONET'13 [52] **"Window-based Rate Adaptation in 802.11n Wireless Networks"**, Ioannis Pefkianakis, Yun Hu, Suk-Bok Lee, Chunyi Peng, Sofia Sakellaridi, Songwu Lu, Springer ACM Mobile Networks and Applications (MONET), Vol. 18, No. 1, pp: 156-169, 2013.
- TECS'12 [53] **"BeepBeep: A High-Accuracy Acoustic-Based System for Ranging and Localization Using COTS Devices"**, Chunyi Peng, Guobin Shen and Yongguang Zhang, ACM Transactions on Embedded Computing Systems, Vol. 11, No. 1, March 2012.
- Neurocom'09 [54] **"Analysis of classification margin for classification accuracy with applications "**, Qutang Cai, Changshui Zhang, Chunyi Peng, Neurocomputing, Vol. 72, No. 7-9, March 2009, pp: 1960-1968.
- MONET'06 [55] **"Utilization and Fairness in Spectrum Assignment for Opportunistic Spectrum Access "**, Chunyi Peng, Haitao Zheng, B.Y. Zhao, *ACM Mobile Networks and Applications (MONET)*, Vol. 11, No. 4, Aug. 2006, pp: 555-576.
- [56] **"On recursive oblique projectors"**, Chunyi Peng, Xianda Zhang, IEEE Signal Processing Letters, Vol. 12, No. 6, June 2005, pp: 433 - 436.
- [57] **"Blind Separation of Convolutive Mixtures Using Oblique Projections (in Chinese)"**, Chunyi Peng, Xiaolong Zhu, Xianda Zhang, Journal of Tsinghua University (Science and Technology), Vol. 25, No. 4, Apr. 2005, pp: 517-520.

Demos and Posters

- “**Demo: In-device, Runtime Cellular Network Information Extraction and Analysis**”, Yuanjie Li, Zengwen Yuan, Haotian Deng, Amber Xiangli, Chunyi Peng, Songwu Lu, ACM MobiCom’16, 2016.
- “**Demo: Achieve Simultaneous Screen-Human Viewing and Hidden Screen-Camera Communication**”, Anran Wang, Zhuoran Li, Gan Fang, Chunyi Peng, Guobin Shen, Bin Zeng, ACM MobiSys’15, 2015.
- “**Demo: A Robust Barcode System for Data Transmissions over Screen-Camera Links**”, Anran Wang, Shuai Ma, Chunming Hu, Jinpeng Huai, Chunyi Peng and Guobin Shen, ACM MobiCom’14, 2014.
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