

ANNUAL REPORT 2013

Computer Networks Group
Institute of Computer Science
Faculty of Mathematics and Computer Science
Georg-August-Universität Göttingen

COMPUTER NETWORKS GROUP
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Computer Networks Group

Introduction

Founded in April 2007, the Computer Networks Group is devoted to cutting-edge leading research and education programs in the field of network architectures, protocols and applications. This report series intends to review the most relevant and important research results and other achievements and activities performed by the Computer Networks Group. The present report is the sixth issue of this series, and summarizes those of the year of 2013.

Group Members

One new PhD student enrolled in the group in 2013: Edo Monticelli (MSc. Trento University). Lingjun Pu from Nankai University and Bruno Ricci from University of Rome "Tor Vergata" joined the group as visiting PhD students. Dr. Mayutan Arumaithurai and Dr. Stephan Sigg joined the group in August and October, respectively.

Dr. Florian Tegeler and Dr. Wei Du completed their postdoc stays and continue to serve as adjunct researchers with NET group; Dr. Wenzhong Li (Nanjing University) completed his 2-year Humboldt Scholar stay on 31st December. Shining Wu and Cong Ding completed their master study in September. Thanks for their contributions to the group!

Also, several master and bachelor student assistants worked on various projects and thesis work; they are an important part of the team.

By the end of year 2013, the research group comprises 1 professor, 3 senior researchers/postdoc fellows, 9 PhD students, 5 master students and several bachelor students. See Table 1 for detailed information.

Table 1: Member of Computer Networks Group (as of 31.12.2013):

Administrative staff	Head	Senior Researchers	Research assistants/PhD students	Adjunct researchers	Master students
Secretary: A. Kadziora System administrator: G. Krull	Prof. Dr. X. Fu	Dr. M. Arumaithurai, Dr. S. Sigg, Dr. W. Li	E. Monticelli, H. Huang, Y. Zhang, N. Tao, D. Koll, J. Chen, L. Jiao, K. Zhu, H. Tschofenig (extern), L. Dai (co-supervise with M. Boos/Psychology & K. Kurz/ Sociology) R. Xu (co-supervise with D. Farina/UMG)	Dr. Y. Chen, Dr. F. Tegeler, Dr. W. Du, Dr. M. Stiemerling, Dr. K.K. Ramakrishnan Visiting Researchers: L. Pu, B. Ricci	E. Maiti, F. Meyer, S. Weiland, S. Albert, S. Pujari

Teaching and Supervision

During 2013 the Group has provided the following courses:

<u>Lectures:</u>	<i>NOTE: WS - Winter Semester, SS - Summer Semester, * - only partly</i>
Computer Networks, 4 ECTS	WS2013/14
Selected Topics in Pervasive Computing, 6 ECTS	WS2013/14
Computer Networks, 4 ECTS (exam only)	SS2013
Advanced Computer Networks, 6 ECTS	SS2013
<u>Exercise classes:</u>	
Computer Networks	WS2013/14
<u>Lab courses:</u>	
Practicum Advanced Networking, 6 ECTS	WS2013/14
Practicum Networking Lab, 6 ECTS	SS2013, WS2013/14
<u>Seminars:</u>	
Adv. Topics in Mobile Communications, 6 ECTS	SS2013
Adv. Topics in Computer Networking, 6 ECTS	WS2013/14
Internet Technologies, 4 ECTS	SS2013, WS2013/14

Completed master theses (2): Shining Wu, Cong Ding

Research Areas and Projects

The Computer Networks group is committed to explore innovative networking technologies and utilize its full potential, knowledge and experience in the analysis, design, and evaluation of emerging and future network technologies, systems, and applications. Its current main research areas include:

- New architectures and platforms for large-scale networks and distributed systems, including information-centric networking, cloud computing and data centers, mobile computing and wireless networking, and related security mechanisms. This has been conducted in collaboration with Microsoft Research, Deutsche Telekom, AT&T Labs, NEC Europe, Nokia Siemens Networks, UCL, University of Rome "Tor Vergata", University of Paris – Marie Curie (Paris 6), Technion – Israel Institute of Technology, Swedish Institute of Computer Science, KDDI, Panasonic, NEC Japan, Osaka University, University of Tokyo, BUPT, Fudan University, Tsinghua University and Nanjing University etc.
- Internet multimedia, transport and network measurement techniques, including congestion control, QoS, signaling and middlebox control, data forwarding/transfer and network measurement for supporting large-scale media streaming and other applications over the Internet, leveraging machine learning (in particular compressive sensing) techniques where appropriate. This area has been in collaboration with AT&T Labs, Columbia University, Duke University, University of Liege, and Tsinghua University etc.
- Social networks/social computing. We work on the development of network infrastructure for large scale socio-aware networking as well as social behavior studies, in collaboration with researchers from Göttingen (including sociologists, socio-psychologists, physicists and epidemiologists), nationally (MPI-DS, T-Labs, L3S) and internationally (Duke University, MIT, University Oregon, University of Cambridge, Swedish Institute of Computer Science, Bell Labs, Nanjing University, Tsinghua University, etc).

Some funded projects in 2013 include:

- GreenICN – Architectures and Applications of Green Information-Centric Networking, sponsored by EU FP7 EU-Japan ICT EU-Japan International Cooperation program (Coordinated by NET Group)
- Principles and Design of Next-Generation Internet Media Streaming, sponsored by DAAD-CSC PPP program
- Collaborative Data Dissemination in Delay Tolerant Mobile Ad Hoc Networks, sponsored by Humboldt Foundation
- Mobile Social Networking, sponsored by DAAD Scholarship program
- Scalable Network Measurement, sponsored by DAAD Scholarship program
- Information-Centric Networking, sponsored by CSC Scholarship program
- Mobile Code Offloading, sponsored by CSC Scholarship program
- Socio-Aware Cloud Computing, sponsored by CSC Scholarship program

In addition, EU FP7 MobileCloud and CleanSky projects (both coordinated by NET Group) have been approved and will start in 2014.

Publications, Technical Reports and Theses

Proceedings

1. Xiaoming Fu, Puneet Sharma, Dijiang Huang, Deep Medhi (Eds.), Proceedings of IEEE 2nd International Conference on Cloud Networking (CloudNet 2013), San Francisco, CA, USA, November 11-13, 2013. ISBN 978-1-4799-0566-9
2. Xiaoming Fu, Volker Hilt, Tilman Wolf, Lixia Zhang and Zhi-Li Zhang (Eds.), Proceedings of IEEE 21st International Conference on Network Protocols (ICNP 2013), Göttingen, Germany, October 7-10, 2013. ISBN 978-1-4799-1270-4.

Book

3. Xiaoming Fu, From Resource Reservation to Extensible IP Signaling, Cuvillier Verlag, Göttingen, Germany, December 2013. ISBN 978-3-95404-601-0.

Papers in Peer-Reviewed Journals

4. Konglin Zhu, Wenzhong Li, Xiaoming Fu, SMART: A Social and Mobile Aware Routing Strategy for Disruption Tolerant Networks, IEEE Transactions on Vehicular Technology (accepted).
5. Dan Li, Hongze Zhao, Mingwei Xu, Xiaoming Fu, Revisiting the Design of Mega Data Centers: Considering Heterogeneity Among Containers, IEEE/ACM Transactions on Networking (in press), DOI: 10.1109/TNET.2013.2280764, 2013.
6. Haomin Yang, Yaoyue Zhang, Yuezhi Zhou, Xiaoming Fu, Hao Liu, Athanasios V. Vasilakos, Provably Secure Three-Party Authenticated Key Agreement Protocol Using Smart Cards, Computer Networks (in press), DOI: 10.1016/j.comnet.2013.08.020, Elsevier, 2013.
7. Hao Liu, Yaoyue Zhang, Yuezhi Zhou, Xiaoming Fu, Laurence Yang, Receiving Buffer Adaptation for High-speed Data Transfer, IEEE Transactions on Computers, 62(11): 2278-2291, IEEE, Nov 2013.
8. Wenzhong Li, Xiaoming Fu, Edward Chan, Sanglu Lu, Daoxu Chen, Golden age: on multi-source software update propagation in pervasive networking environments, Science China Information Sciences, 56(8): 1-15, Springer, August 2013.

9. Konglin Zhu, Wenzhong Li, Xiaoming Fu, Modeling population growth in online social networks, *Complex Adaptive Systems Modeling (CASM)*, 1:14, June 2013. 16 pages.
10. Sufian Hameed, Xiaoming Fu, Pan Hui and Nishanth Satry, Fighting Spam Using Social GateKeepers, *Networking Science*, 2(1-2): 28-41, Springer Verlag, May 2013.

Papers in Peer-Reviewed International Conferences and Workshops

11. Lei Jiao, Jun Li, Wei Du, Xiaoming Fu, Multi-Objective Data Placement for Multi-Cloud Socially Aware Services, *IEEE INFOCOM 2014*, Toronto, Canada, April 2014. (Acceptance rate: $320/1645=19.4\%$)
12. Hao Liu, Yaoxue Zhang, Yuezhi Zhou, Di Zhang, Xiaoming Fu, K. K. Ramakrishnan, Mining Checkins From Location-sharing Services for Client-independent IP Geolocation, *IEEE INFOCOM 2014*, Toronto, Canada, April 2014. (Acceptance rate: $320/1645=19.4\%$)
13. Yu Cao, Mingwei Xu, Xiaoming Fu, Enhuan Dong, Explicit Multipath Congestion Control for Data Center Networks, *9th ACM International Conference on emerging Networking EXperiments and Technologies (CoNEXT 2013)*, Santa Barbara, CA, USA, ACM, December 2013. (Acceptance rate: $29/143=20\%$)
14. Cong Ding, Yang Chen, Xiaoming Fu, Crowd Crawling: Towards Collaborative Data Collection for Large-scale Online Social Networks, *1st ACM Conference on Online Social Networks (COSN 2013)*, Boston, USA, ACM, October 2013. (Acceptance rate: $22/138=15\%$)
15. Jiachen Chen, Mayutan Arumaithurai, Xiaoming Fu, K. K. Ramakrishnan, Reliable Publish/Subscribe in Content-Centric Networks, *3rd ACM SIGCOMM Workshop on Information-Centric Networking (ICN 2013)*, Hong Kong, ACM, August 2013. (Acceptance rate: 20%)
16. Lei Jiao, Xiaoming Fu, Roy Friedman, Stefano Secci, Zbigniew Smoreda and Hannes Tschofenig, Cloud-based Computation Offloading for Mobile Devices: State of the Art, Challenges and Opportunities, *Future Network & Mobile Summit 2013*, Lisbon, Portugal, July 2013.
17. Xingshen Wei, Wenzhong Li, Xiaoliang Wang, Sanglu Lu, Xiaoming Fu, Recovering Erroneous Data Bits Using Error Estimating Code, *18th IEEE Symposium on Computers and Communications (ISCC 2013)*, Split, Croatia, IEEE, July 2013.
18. Lei Jiao, Jun Li, Xiaoming Fu, Optimizing Data Center Traffic of Online Social Networks, *The 19th IEEE International Workshop on Local and Metropolitan Area Networks (LANMAN 2013)*, Brussels, Belgium, April 2013 (Best Paper Award)

Demos and Posters

19. Narisu Tao, Wei Du, and Xiaoming Fu, Ratings of network paths inference by compressive sensing, *Workshop on Statistical Issues in Compressive Sensing*, poster session, Göttingen, November 2013.
20. Jiachen Chen, Mayutan Arumaithurai, Xiaoming Fu, K. K. Ramakrishnan, CNS: A Content-centric Notification Service, the *21st IEEE International Conference on Network Protocols (ICNP 2013)*, demo session, Göttingen, October 2013.
21. David Koll, Jun Li, Joshua Stein, and Xiaoming Fu, On the Effectiveness of Sybil Defenses Based on Online Social Networks, *IEEE ICNP 2013*, poster session, Göttingen, October 2013.
22. Lei Jiao, Tianyin Xu, Yang Chen, Xiaoming Fu, Decentralizing Microblogging Services by Differentiating User Traffic Demands. Poster/Demo session at *NetSys 2013*, in: *Praxis der Informationsverarbeitung und Kommunikation* 36(1): 50, Feb 2013.

Master theses

23. Shining Wu, “On Security of Decentralized, Matrix Factorization-Based Network Coordinate Systems”, Master Thesis, Institute of Computer Science, University of Göttingen, August 2013.
24. Cong Ding, “Measurement and Analysis of Google Scholar”, Master Thesis, Institute of Computer Science, University of Göttingen, July 2013.

Scientific Contacts

Incoming researcher visits

Incoming visitors	Institution (from)	Detailed information	Date
Prof. Henri Angelino	National Institute of Informatics, Japan	Colloquium “The National Institute of Informatics, its main research activities and International Cooperation policy. Case study NII-German universities and DAAD special program”	Dec 2013
Assoc Prof. Edith Ngai, Farshid Hassani Bijarbooneh, Frederik Hermans	Uppsala University, Sweden	U4-Network Research Visit for one week. Colloquia “Information-centric and ubiquitous data collection for Internet-of-Things applications” (Edith), “Optimising Quality of Information in Data Collection for Mobile Sensor Networks” (Farshid), “Classifying Interference in Low-Power Wireless Networks” (Frederik)	Nov 2013
Dr. K. K. Ramakrishnan	AT&T Labs-Research, USA	Visiting 2 days on ICN and cloud computing related research	Oct 2013
Dr. K. K. Ramakrishnan	AT&T Labs-Research, USA	Visiting 2 days for GreenICN research. Colloquium “Optimal Content Placement for a Large-Scale VoD System by exploiting Viewing Behavior”	July 2013
Profs. Jun Guo, Jie Yang, Zhanyu Ma, Lin Zhang	Beijing University of Posts and Telecommunications, Beijing, China	Visiting 2 days for MobileCloud project	June 2013
Dr. Volker Hilt	Bell Labs, Germany	Colloquium “Services & Content Networking”, and ICNP’13 preparation meetings	June 2013
Prof. Jyun-Cheng Wang	National Tsinghua Hua Univ, Taiwan	Colloquium “How Social Information Influences Decision Making”	May 2013
Prof. JarDer Luo	Tsinghua University, Beijing	3-day research visit and colloquium “Why Do Chinese Venture Capitals Invest Jointly? - An Analysis of Complex Investment Network”	May 2013
Dr. Ruidong Li	National Institute of Information and Technology (NICT), Japan	Colloquium “Information-Centric Network Architectures: Designs, Protocols, and Challenges”	May 2013
Prof. Gang Lu, Dr. Xin Zhu, Weiwei Ming, Prof. Yuan Tan	Huazhong University of Science and Technology, Wuhan, China	Visiting the faculty of math and CS, and the university	Apr 2013
Hannes Tschofenig	Nokia Siemens Networks, Finland	Short visit to NET group	Mar 2013
Prof. Piet van Mieghem	TU Delft, the Netherlands	Colloquium “Epidemic modeling on networks with applications to network robustness against malware spread and to information dissemination in social networks”	Feb 2013
Galen Wilkerson	Northeastern University, Boston,	Sustainability, Complex Systems, and Computer Science: The Perfect Fit of Powerful tools to Planetary-Scale	Feb 2013

	USA and TU Berlin, Germany	(Energy/Pollution) Problems?	
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Outgoing research visits

Outgoing visitors	Institution visited	Detailed information	Date
K. Zhu	Fudan University, China	1-month DAAD visit; invited talk at CAS-ICT, BUPT, Nankai University and Donghua University	Nov-Dec 2013
S. Sigg	National Institute of Informatics, Tokyo, Japan	1 week research visit	Nov 2013
H. Huang	Fudan University, China	1-month DAAD visit	Oct-Nov 2013
W. Du	Uppsala University, Sweden	2-month U4-Network visit	Sept-Nov 2013
J. Chen	Fudan University, China	2-month DAAD visit	Aug-Oct 2013
X. Fu	Fudan University, China	Short DAAD visit	July 2013
X. Fu	Tsinghua University, China	Visiting Dept of Computer Science & Technology (Profs. Yaoxue Zhang, Yuezhi Zhou, Jie Tang, Dan Li)	July 2013
X. Fu	TU Braunschweig	ITIS Research day	July 2013
L. Jiao	Xi'an, China	Invited talk at Xi'an Jiao Tong University (host: Prof. Chengcheng Hu), Xidian University (host: Prof. Jiandong Li) and Northwestern Polytechnic University: "Cost Optimization for Online Social Networks on Geo-Distributed Clouds"	Mar 2013
X. Fu	Bell Labs, Stuttgart, Germany	Visiting Network Research Group (Dr. Volker Hilt), colloquium "Content Distribution: From Client/Service Model to Content-Oriented Pub/Sub System"	Mar 2013
X. Fu	TU Berlin, Germany	Visiting Telecommunication Networks Group (Prof. Adam Wolisz)	Mar 2013

Conference and event participations and presentations

Of particular importance: During October 7-10, we successfully organized the 21st International Conference on Network Protocols (ICNP 2013). Thank all contributors, collaborators and volunteers for their contributions to the extremely successful organization of this premium conference on computer networking in Göttingen!

Participant	Conference	Detailed information	Date
S. Sigg	Mobiquitous 2013, Tokyo, Japan	Presenting a paper "Passive, device-free recognition on your mobile phone: tools, features and a case-study"	Dec 2013
N. Tao	Statistical Issues in Compressive Sensing, Göttingen	Presenting a demo "Rating Network Paths Using Compressive Sensing"	Nov 2013
X. Fu	DFG-SFB MAKI kickoff meeting, TU Darmstadt	Attending the meeting, then short visit to DT (Rüdiger Geib)	Nov 2013
M. Arumaithurai	Workshop on Web Science, Hannover	Attending the workshop and presenting a talk	Nov 2013
M. Arumaithurai	L3S Workshop, Goslar	Attending the workshop and presenting a talk	Oct-Nov 2013

M. Arumaithurai	EU FP7 ICT Workshop, Brussels, Belgium	Attending the workshop and presenting GreenICN project	Oct 2013
X. Fu, W. Li	Interdisciplinary Team Building Workshop, MPI-DS, Göttingen	Brainstorming several interdisciplinary topics with different fields (CS, healthcare, sociology, psychology, physics) related to social network research	Oct 2013
All	IEEE ICNP 2013, Göttingen	As host; David presenting a poster "On the Effectiveness of Sybil Defenses Based on Online Social Networks" and Jiachen presenting a demo "CNS: A Content-centric Notification Service"	Oct 2013
C. Ding	ACM COSN 2013, Boston, USA	Presenting a paper "Crowd Crawling: Towards Collaborative Data Collection for Large-scale Online Social Networks"	Oct 2013
J. Chen	ACM SIGCOMM 2013, Hong Kong	Presenting a paper "Reliable Publish/Subscribe in Content-Centric Networks" at ICN workshop	Aug 2013
X. Fu, KK Ramakrishnan, M. Arumaithurai, J. Chen	IETF meeting, Berlin	Attending ICN session(s)	July-Aug 2013
X. Fu	DAAD Deutschland Alumni meeting	Panelist	July 2013
W. Li	IEEE ISCC 2013, Split, Croatia	Presenting a paper "Recovering Erroneous Data Bits Using Error Estimating Code"	July 2013
X. Fu	Future Network & Mobile Summit 2013, Lisbon, Portugal	Presenting a paper "Cloud-based Computation Offloading for Mobile Devices: State of the Art, Challenges and Opportunities" and meeting EU GreenICN Project Officer	July 2013
X. Fu	Forum on Future Computing, Shanghai, China	Invited speech "Transparent Mobile Cloud Computing"	July 2013
X. Fu	5. Deutsch-Chinesische Professorenforum, Goslar	Presenting MobileCloud project overview	June 2013
X. Fu	IEEE ICC 2013, Budapest, Hungary	Chairing ITC meeting and attending ComMag editorial board meeting	June 2013
X. Fu	Sunbelt 2013, Hamburg	Attending the conference	May 2013
L. Jiao	IEEE LANMAN 2013, Brussels, Belgium	Presenting a paper "Optimizing Data Center Traffic of Online Social Networks"	Apr 2013
X. Fu	IEEE/GI Conference on Networked Systems (NetSys), Stuttgart	Attending the conference	Mar 2013

Project meetings*

Participant	Host institution/location	Detailed information	Date
M. Arumaithurai, X. Fu, W. Li	NET or Psychology dept, Göttingen	Meeting Prof. Boos for interdisciplinary projects	Nov, Dec 2013
W. Li, K. Zhu, X. Fu	NET or MPI-DS, Göttingen	Meeting Dr. J. Nagler for interdisciplinary projects	May, July, Oct, Nov 2013
M. Arumaithurai, KK Ramakrishnan	UTO, Tokyo, Japan	GreenICN plenary meeting	Nov 2013
M. Arumaithurai, KK Ramakrishnan, X. Fu, M. Arumaithurai, E. Monticelli	NET Group, Göttingen	GreneICN advisory board & EU-Japan meeting (UGOE, Bell Labs, UCLA, AT&T, KDDI, UTO, UOS)	Oct 2013
M. Arumaithurai, KK Ramakrishnan, X. Fu, M. Arumaithurai	NEC Europe, Heidelberg, Germany	GreenICN kickoff meeting (Plenary meeting)	May 2013
X. Fu, W. Li	Göttingen	Intensive meetings of the IRTG-preparation team: NJU (Prof. W. Li), THU (Prof. J. Luo), UGOE (Profs. Boos, Fu, Grabowski, Hogrefe, Kurz, Nagler)	May 2013; Apr-July 2013 weekly meetings/seminars
X. Fu	Göttingen	Simulation Center project kickoff meeting	Jan 2013

* Note: project meetings held as teleconferences only are not included here.

News Press Releases

Source	Detailed information	Date/Edition
Alexander von Humboldt Foundation	Dr. Xu Chen (Arizona State Univ) receives Humboldt Research Fellowship (among the only 6-7 recipients annually in the domain of computer science)	Nov 2013
DFG	ICNP 2013 receives DFG sponsorship	Aug 2013
Univ Göttingen press news	Kampf gegen den Bot - Göttinger Doktorand entwickelt neues System zur Erkennung von Schadsoftware im Internet	Nr. 51/2013 19.03.2013
Göttingen International Newsletter	New European Project GreenICN Coordinated by the University of Göttingen	02/2013
Univ Göttingen press news	Simulationswissenschaftliches Zentrum offiziell gestartet	Nr. 7/2013 16.01.2013

Awards

- Humboldt Fellowship (Wenzhong Li, Xu Chen)
- IEEE Communications Society Distinguished Lecturer (Xiaoming Fu) 2014-2015
- ACM COSN 2013 Student Traveling Grant (Cong Ding)
- ACM SIGCOMM 2013 Student Traveling Grant (Jiachen Chen)
- IEEE LANMAN 2013 Best Paper Award (Lei Jiao, Xiaoming Fu)
- GI-Dissertation Award 2013 Nomination (Florian Tegeler)

Professional Services (X. Fu unless noted)

University Services

- International Officer - Computer Science, Faculty of Mathematics & Computer Science, University of Göttingen
- Substitution Member of Faculty Board, Faculty of Mathematics and Computer Science, University of Göttingen
- Board member, Institute of Computer Science, University of Göttingen
- Program committee board of International Master/PhD program “Internet Technology and Information Systems (ITIS)”, University of Göttingen
- Participant of Doctoral program “PhD in Computer Science” (PCS) program, University of Göttingen
- Member of PhD Committee, Computer Science, University of Göttingen (candidate: Roman Seibel, Oct 2013)
- Examiner and member of PhD Committee, Computer Science / Medical Informatics, University of Göttingen/University Medical Center Göttingen (candidate: Mathias Kaspar, Aug 2013)
- Member of PhD Committee, Computer Science, University of Göttingen (candidate: Youssef El Hadji Shehadeh, April 2013)
- Examiner and member of PhD Committee, Computer Science, University of Göttingen (candidate: Saleh Al-Shadly, April 2013)
- Coordinator of Planet-Lab membership for University of Göttingen

Elected and Appointed Positions

- Chair, Internet Technical Committee (ITC) of IEEE Communications Society (COMSOC) and of the Internet Society (ISOC)
- Chair, Nomination and Election Committee Chair, ITC 2013 Election
- Changjiang Scholar Visiting Professorship, Ministry of Education, China
- Vice Director, Center for Social Network Research, Tsinghua University, Beijing, China
- Member of Internet Architecture Board (IAB) – Hannes Tschofenig
- Member of Internet Engineering Steering Group (IESG) and Transport Area Director – Martin Stiemerling

Conference organization

- Steering Committee Chair, IEEE Global Internet Symposium (GI)
- Steering Committee, ACM Conference on Online Social Networks (COSN)
- Steering Committee, ACM International Workshop on Mobility in the Evolving Internet Architecture (MobiArch)
- Steering Committee, ACM International Workshop on Hot Topics in Planet-scale Measurement (HotPlanet)
- General Co-Chair, IEEE ICNP 2013
- Local Organization Co-Chair, IEEE ICNP 2013 (David Koll)
- Local Organization Committee, IEEE ICNP 2013 (Annette Kadziora)
- Poster-Demo Co-Chair, IEEE ICNP 2013 (Mayutan Arumathurai)
- Registration Chair, IEEE ICNP 2013 (Wenzhong Li)
- Publications Chair, ACM COSN 2013

Technical Program Committees

- TPC Co-Chair, ACM MOBICOM 2013 MobiArch Workshop (Wenzhong Li)
- TPC Co-Chair, IEEE CloudNet 2013
- TPC Member, ACM SIGCOMM 2013 ICN Workshop (Mayutan Arumathurai)
- TPC Member, IEEE MASS 2013 (Wenzhong Li, Xiaoming Fu)
- TPC Member, IEEE INFOCOM 2013
- TPC Member, IEEE/ACM IWQoS 2013
- TPC Member, IFIP Networking 2013
- TPC Member, SIAM SDM 2013
- TPC Member, IEEE Workshop on Distributed Cloud Computing (DCC)

Journal editorship

- Technical Editor, IEEE Communications Magazine
- Associate Editor, IEEE Transactions on Network and Service Management
- Area Editor, Elsevier Computer Networks Journal
- Area Editor, Elsevier Computer Communications Journal
- Associate Editor, Springer Networking Science Journal
- Guest Co-Editor, International Journal of Communication Systems, Special Issue on Mobile Internet: Content, Security and Terminal