

ANNUAL REPORT 2011

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

COMPUTER NETWORKS GROUP
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January 3, 2012
Editor: Prof. Dr. Xiaoming Fu

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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 fourth issue of this series, and summarizes those of the year of 2011.

Group Members

Three new PhD students enrolled in the group in 2011: David Koll (MSc. Univ Göttingen), Yuan Zhang (MSc. Tsinghua Univ), and Narisu Tao (MSc. Nanjing Univ). Martin Stiemerling and Niklas Neumann defended their PhD theses in 2011.

Shanshi Yang (Nanjing University) visits the NET Group between October 2011-March 2012, and Lianghao Dai (Tsinghua University) visits between November 2011 and March 2012. In addition, Dr. Wenzhong Li (Nanjing University) visited NET group during Sept 2010-Feb 2011, and became a Humboldt Scholar starting in Nov 2011. Narisu Tao visited NET group during Feb-July 2011 and became a PhD student at NET group in Sept 2011.

Dr. Yang Chen and Tianyin Xu left NET group and moved to Duke Univ in Apr 2011 and UCSD in Sept 2011, respectively, both in USA. Dr. Mayutan Arumathurai joined NEC Europe Labs, Heidelberg and Dr. Niklas Neumann became an independent consultant in June 2011. We thank them for their contributions and wish them best luck.

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

By the end of year 2011, the research group comprises 1 professor, 1 senior researcher (Humboldt fellow), 9 PhD students, 6 master students and 3 bachelor students. See Table 1 for detailed information.

Table 1: Member of Computer Networks Group (as of 31.12.2011):

Administrative staff	Head	Senior Researchers	Research assistants/ PhD students	Adjunct researchers	Master students	Bachelor students
Secretary: A. Kadziora System administrator: G. Krull	Prof. Dr. X. Fu	Dr. W. Li	Y. Zhang, N. Tao, D. Koll, J. Chen, L. Jiao, K. Zhu, S. Hameed, F. Tegeler, H. Tschofenig (extern)	Dr. Y. Chen, Dr. M. Arumathurai, T. Xu	C. Ding, S. Wu, C. Dickmann, F. Meyer, S. Yang, L. Dai	J. Agricola, F. Mathey, K. Jakobsen

Teaching and Supervision

During 2011 the Group has provided the following courses:

Lectures:

Computer Networks, 4ECTS

Computer Networks, 4ECTS (exam only)

*NOTE: WS - Winter Semester, SS - Summer Semester, * - only partly*

WS2011/12

SS2011

Exercise classes:

Computer Networks

WS2011/12

Lab courses:

Practicum Advanced Networking, 6 ECTS

WS2011/12

Practicum Networking Lab, 6 ECTS

SS2011, WS2011/12

Seminars:

Adv. Topics in Mobile Communications, 6ECTS

SS2011

Adv. Topics in Computer Networking, 6ECTS

WS2011/12

Internet Technologies, 4ECTS

SS2011, WS2011/12

Social Network Colloquium:

Speaker	Speaker's Affiliation	Detailed information	Date
Dr. Nan Zheng	School of Medicine, Nanjing University, China	MSM behavior network and its public health significance in China	20.12.2011
Prof. Zhi-Hua Zhou	Department of Computer Science, Nanjing University, China	Exploiting Unlabeled Data with Multiple Views	12.09.2011
Prof. Margarete Boos	Georg-Elias-Müller-Institute for Psychology, Univ Göttingen	Coordination in Group Movements: Ideal Patterns	22.06.2011
Dr. Jan Nagler	MPI for Dynamics and Selforganization and Faculty of Physics, Univ Göttingen	Is Human Dynamics Ultra-Bursty?	17.06.2011

Completed PhD dissertations (2): Martin Stiemerling (Feb 2011), Niklas Neumann (Jun 2011).

Completed bachelor theses (1): Tobias Kloht (Oct 2011).

Hosted pupil interns (1): Ray Zhao (Felix-Klein-Gymnasium, Nov 2011).

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 cloud computing, mobile computing, P2P, network coordinate systems, and their experimentations with PLANET-LAB and other platforms, including their system performance and security implications and enhancements. This has been conducted in collaboration with Microsoft Research, Deutsche Telekom, AT&T Labs, NEC, NSN, GWDG, Tsinghua University and Nanjing University.
- Internet multimedia and transport mechanisms, including congestion control, IP-based emergency services, forwarding, and content centric networking for media streaming over the Internet. This area has been in

collaboration with Columbia University, Nokia Siemens Networks, AT&T Labs, UCLA, Fudan University, and Tsinghua University.

- Social networking and mobile social networks. We work on the development of network infrastructure for large scale mobile social networking (e.g., Cuckoo, GEMSTONE) as well as social behavior studies, in collaboration with collaborators from Univ Goettingen (including sociologists, psychologists, physicists and epidemiologists), nationally (MPI-DS, T-Labs, etc) and internationally (Nanjing University, Tsinghua University, University of Cambridge, University of Oregon, UCSB, SICS, IIT-CNR, etc.).

Funded projects in 2011 include:

- Simulation Research Center, sponsored by the Ministry for Science and Culture of Lower Saxony
- Structure, Functionality and Dynamics of Social Networks, sponsored by Lindeman Foundation
- 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 Cloud Computing, sponsored by Microsoft Research, and DAAD Scholarship program
- Mobile Social Networking, sponsored by DAAD Scholarship program
- Content Centric Networking, sponsored by CSC Scholarship program

Publications, Technical Reports and Theses

Papers in Journals

1. Yang Chen, Xiao Wang, Cong Shi, Eng Keong Lua, Xiaoming Fu, Beixing Deng, Xing Li, Phoenix: A Weight-based Network Coordinate System Using Matrix Factorization, IEEE Transactions on Network and Service Management, 8(4):334-347, IEEE, December 2011.
2. Zhuo Chen, Yang Chen, Cong Ding, Beixing Deng, Xing Li, Pomelo: Accurate and Decentralized Shortest-path Distance Prediction in Social Graphs, ACM SIGCOMM Computer Communication Review, 41(4): 406-407, ACM, October 2011.

Papers in International Conferences

3. Zhuo Chen, Yang Chen, Yibo Zhu, Cong Ding, Beixing Deng, Xing Li, Tarantula: Towards an Accurate Network Coordinate System by Handling Major Portion of TIVs, IEEE GLOBECOM 2011, Houston, TX, USA, IEEE, December 2011. (Acceptance rate: $1070/2923 = 36.6\%$)
4. Florian Tegeler, David Koll, and Xiaoming Fu, GEMSTONE: Empowering Decentralized Social Networking with High Data Availability, IEEE GLOBECOM 2011 - Selected Areas in Communications Symposium - Social Networks Track, Houston, TX, USA, IEEE, December 2011. (Acceptance rate: $1070/2923 = 36.6\%$)
5. Tianyin Xu, Yang Chen, Lei Jiao, Ben Y. Zhao, Pan Hui, Xiaoming Fu, Scaling Microblogging Services with Divergent Traffic Demands, ACM/IFIP/USENIX 12th International Middleware Conference (Middleware 2011), Lisboa, Portugal, Lecture Notes in Computer Science 7049, pages 20-40, Springer Verlag, December 2011. (Acceptance rate: $24/125 = 19.2\%$)
6. Jiachen Chen, Mayutan Arumathurai, Lei Jiao, Xiaoming Fu, K. K. Ramakrishnan, COPSS: An Efficient Content Oriented Publish/Subscribe System, ACM/IEEE Symposium on Architectures for Networking and Communications Systems (ANCS 2011), Brooklyn, NY, USA, October 2011. (Acceptance rate: $20/62=32.2\%$)

7. Dan Li, Mingwei Xu, Hongze Zhao, Xiaoming Fu, Building Mega Data Centers from Heterogeneous Containers, IEEE International Conference on Network Protocols (ICNP 2011), Vancouver, Canada, IEEE, October 2011. (Acceptance rate: $31/189=16.4\%$)
8. Yu Tian, Wenzhong Li, Zhuo Li, Sanglu Lu, Xiaoming Fu, Low Overhead Dynamic Spectrum Reallocation in Opportunistic Spectrum Access Networks, Proceedings of IEEE International Conference on Computer Communications and Networks (ICCCN 2011), Maui, Hawaii, USA, August 2011. (Acceptance rate: $134/452=29.6\%$)
9. Konglin Zhu, Kelvin (Biao) Zhou, Xiaoming Fu, and Mario Gerla, Geo-Assisted Multicast Inter-Domain Routing (GMIDR) Protocol for MANETs, IEEE International Conference on Communications (ICC) 2011, Kyoto, Japan, June 2011. (Acceptance rate: $1093/2838=38.5\%$)
10. Mayutan Arumathurai, Xiaoming Fu, K. K. Ramakrishnan, NF-TCP: A Network Friendly TCP Variant for Background Delay-Insensitive Applications, Proc. 10th IFIP International Conference on Networking (Networking 2011), Valencia, Spain, Springer-Verlag, May 2011. (Acceptance rate: $64/294 = 21.8\%$)
11. Jin Zhao, Xinya Zhang, Xin Wang, Yaodong Deng, and Xiaoming Fu, Exploiting Graphics Processors for High-performance IP Lookup in Software Routers, IEEE INFOCOM 2011, Mini-conference, Shanghai, China, April 2011. (Acceptance rate: $(291+136)/1823 = 23.4\%$)
12. Qinhui Wang, Baoliu Ye, Tianyin Xu, Sanglu Lu, An Approximate Truthfulness Motivated Spectrum Auction for Dynamic Spectrum Access, IEEE Wireless Communications and Networking Conference (WCNC 2011), Quintana-Roo, Mexico, March 2011.

Workshop Papers, Posters, Extended Abstracts

13. Lei Jiao, Tianyin Xu, Jun Li, Xiaoming Fu, Latency-Aware Data Partitioning for Geo-Replicated Online Social Networks, ACM/IFIP/USENIX 12th International Middleware Conference (Middleware 2011), Poster session, Lisboa, Portugal, December 2011.
14. Sufian Hameed, Xiaoming Fu, Pan Hui and Nishanth Sastry, LENS: Leveraging Social Networking and Trust to Prevent Spam Transmission, The 2nd IEEE Workshop on Security & Trust in the Future Internet (FIST'11), Co-located with IEEE ICNP 2011, Vancouver, BC Canada, October 2011. (Invited Paper)
15. Jiachen Chen, Mayutan Arumathurai, Xiaoming Fu, K. K. Ramakrishnan, G-COPSS: A Content Centric Communication Infrastructure for Gaming Applications, The 18th IEEE International Workshop on Local and Metropolitan Area Networks (LANMAN 2011), Chapel Hill, NC, USA, October 2011.
16. Jiachen Chen, Mayutan Arumathurai, Xiaoming Fu, K. K. Ramakrishnan, G-COPSS: A Content Centric Communication Infrastructure for Gaming Applications, The 11th Würzburg Workshop on IP: Joint ITG and Euro-NF Workshop "Visions of Future Generation Networks" (EuroView 2011), Würzburg, Germany, Aug 2011.
17. Tianyi Wang, Yang Chen, Zengbin Zhang, Tianyin Xu, Long Jin, Pan Hui, Beixing Deng, Xing Li, Understanding Graph Sampling Algorithms for Social Network Analysis, The 3rd ICDCS Workshop on Simplifying Complex Networks for Practitioners (SIMPLEX'11), Minneapolis, MN, USA, June 2011.
18. Long Jin, Yang Chen, Pan Hui, Cong Ding, Tianyi Wang, Athanasios Vasilakos, Beixing Deng, Xing Li, Albatross Sampling: Robust and Effective Hybrid Vertex Sampling for Social Graphs, The 3rd ACM Workshop on Hot Topics in Planet-scale Measurement (HotPlanet'11), Co-located with ACM MobiSys 2011, Washington DC, USA, June 2011.
19. Konglin Zhu, Pan Hui, Yang Chen, Xiaoming Fu, Wenzhong Li, Exploring User Social Behaviors in Mobile Social Applications, The 4th ACM Workshop on Social Network Systems (SNS 2011), in conjunction with ACM EuroSys 2011, Salzburg, Austria, April 2011.
20. Sufian Hameed, Pan Hui, Xiaoming Fu, Nishanth Sastry, LENS: LEveraging Social Networking and trust to prevent Spam transmission, The 5th ACM EuroSys Doctoral Workshop (EuroDW 2011), Salzburg, Austria, April 2011.

Internet Standardizations

21. S. Krishnan, N. Steinleitner, Y. Qiu and G. Bajko, Guidelines for firewall administrators regarding MIPv6 traffic, IETF MEXT Working Group, Oct 2011, <http://tools.ietf.org/html/draft-ietf-mext-firewall-admin-05>

22. S. Krishnan, Y. Sheffer, N. Steinleitner, and G. Bajko, Guidelines for firewall vendors regarding MIPv6 traffic, IETF MEXT Working Group, Oct 2011, <http://tools.ietf.org/html/draft-ietf-mext-firewall-vendor-05>
23. Yingjie Gu, Ning Zong, Hui Zhang, Yunfei Zhang, Jun Lei, Ganzalo Camarillo, Yong Liu, Delfin Montuno, and Lei Xie, Survey of P2P Streaming Applications, IETF PPSP Working Group, July 2011, <http://tools.ietf.org/html/draft-ietf-ppsp-survey-02>
24. Takako Sanda, Xiaoming Fu, Seong-Ho Jeong, Jukka Manner, and Hannes Tschofenig, NSIS Protocol Operation in Mobile Environments, Internet Engineering Task Force, RFC 5980, Next Steps in Signaling (NSIS) Working Group, ISSN: 2070-1721, March 2011.
25. Xiaoming Fu, Christian Dickmann, and Jon Crowcroft, General Internet Signaling Transport (GIST) over Stream Control Transmission Protocol (SCTP) and Datagram Transport Layer Security (DTLS), RFC 6084, Internet Engineering Task Force, Next Steps in Signaling (NSIS) Working Group, January 2011.

PhD dissertations

26. Niklas Neumann, “Decentralized Network Based Mobility Management: Framework, System Design and Evaluation”, PhD Dissertation, Faculty of Mathematics and Computer Science, University of Göttingen, June 2011.
27. Martin Stiemerling, “Cooperative Internet Access in Resource Constrained Environments”, PhD Dissertation, Faculty of Mathematics and Computer Science, University of Göttingen, Feb 2011.

Master theses:

None completed in 2011.

Bachelor theses:

28. Tobias Kloht, “Leveraging Identity-based Authentication for Email Sender Authentication”, Bachelor Thesis, Institute of Computer Science, University of Göttingen, October 2011.

Technical reports

No. (IFI-TB-)	Authors	Title	Date
2011-07	Cong Ding, Yang Chen, Zhuo Chen, Tianyin Xu, Long Jin, Xiaoming Fu	A Scalable and ISP-Friendly Server Selection Scheme in Cloud Services	Sept 2011
2011-06	Jiachen Chen, Mayutan Arumathurai, Lei Jiao, Xiaoming Fu, K. K. Ramakrishnan	COPS: An Efficient Content Oriented Publish/Subscribe System	June 2011
2011-04	Jiachen Chen, Lei Jiao, Mayutan Arumathurai, Xiaoming Fu, K. K. Ramakrishnan	PS-CCN: Achieving an Efficient Publish/Subscribe Capability for Content-Centric Networks	May 2011
2011-02	Sufian Hameed, Pan Hui, Xiaoming Fu, Nishanth Sastry	LENS: LEveraging social Networking and trust to prevent Spam transmission	Feb 2011
2011-01	Tianyin Xu, Yang Chen, Lei Jiao, Ben Y. Zhao, Pan Hui, and Xiaoming Fu	Decoupling Social Messaging and News Delivery in Microblogging Services	Jan 2011

Scientific Contacts and Press News

Incoming researcher visits

Incoming visitors	Institution (from)	Detailed information	Date
Lianghao Dai	Dept of Sociology, Tsinghua Univ,	Visiting for 4 months	Nov 2011- Mar 2012

	Beijing, China		
Dr. K. K. Ramakrishnan	AT&T Labs – Research, USA	Visiting for 4 days: CleanSky and COPSS project meetings; colloquium “PipeCloud: Using Causality to Overcome Speed-of-Light Delays in Cloud-Based Disaster Recovery”	Nov 2011
Prof. Zhi-Hua Zhou	Nanjing University, China	Colloquium “Exploiting Unlabeled Data with Multiple Views” and discussion with NET group	Sept 2011
Prof. Yongfeng Huang	Tsinghua University, China	Visiting for 2 days, discussing possible collaborations	Aug 2011
Prof. Hongbin Zha	Peking University, China	Visiting for 1 day, discussing possible collaborations on joint researches and student/researcher exchanges	June 2011
Prof. Roy Friedman	Technion, Israel	Colloquium “On Power and Throughput Tradeoffs of WiFi and Bluetooth in Smartphones”; Mobile Cloud project and distributed social networking project meetings	June 2011
Prof. Otto Spaniol	RWTH Aachen, Germany	Examiner and PhD committee Niklas Neumann, and discussion on project and research issues	June 2011
Prof. Jun Li	University of Oregon, USA	Visiting for 1 week, colloquium “I-seismograph: Observing and Measuring Internet Earthquakes”	May 2011
Dr. Pan Hui	T-Labs, Germany	Visiting and intensive discussions with group members	Mar 2011
Narisu Tao	Nanjing Univ, China	Visiting scholar for 6 months	Feb – July 2011
Christian Dickmann	VMware, USA	Invited talk “First-Hand Experiences on Software Development and Job Seeking at Silicon Valley”	Jan 2011
Prof. Henning Schulzrinne	Columbia University, USA	Colloquium “Where Technology Meets Policy - Network Neutrality”; PhD exam committee Martin Stiernerling	Jan 2011
Dr. Wenzhong Li	Nanjing University, China	Visiting for 6 months (LiSUM) Colloquium “Data Caching and Dissemination in Wireless Networks” (14.09.2010)	Sept 2010- Feb 2011

Outgoing research visits

Outgoing visitors	Institution visited	Detailed information	Date
X. Fu	Virje University of Brussels, Belgium	Invited talk “Cuckoo: Scaling Microblogging Services with Divergent Traffic Demands”	Nov 2011
X. Fu	University of Victoria, Canada	Invited talk “Cuckoo: Scaling Microblogging Services with Divergent Traffic Demands”	Nov 2011
X. Fu	Simon Fraser University, Canada	Visiting the Department of Computer Science (Prof. Jiang-Chuan Liu)	Nov 2011
X. Fu	University of Massachusetts, Lowell, USA	Invited talk “Cuckoo: Scaling Microblogging Services with Divergent Traffic Demands”	Oct 2011
X. Fu	Duke University, USA	Visiting Department of Computer Science (Dr. Yang Chen)	Oct 2011
X. Fu	Tsinghua University, China	Visiting the Departments of Computer Science (Profs. Yaoxue Zhang, Yuezhi Zhou, Dan Li), Electronic Engineering (Profs. Yongfeng Huang, Zhisheng Niu, Jian Song, Lin Zhang), and Sociology (Prof. Jar-Der Luo)	Jan, Apr, July 2011
X. Fu	Peking University, China	Visiting the School of EECS (Prof. Ru Huang, Prof. Hongbin Zha)	July 2011
J. Chen	Fudan University,	9-day DAAD visit, invited talk “COPSS: An Efficient Content	Dec 2011

	China	Oriented Publish/Subscribe System”	
F. Tegeler	Fudan University, China	1-month DAAD visit, invited talk “GEMSTONE: Empowering Decentralized Social Networking with High Data Availability”	Oct-Nov 2011
L. Jiao	Fudan University, China	1-month DAAD visit, invited talk “Latency-Aware Data Partitioning for Geo-Replicated Online Social Networks”	Sept-Oct 2011
X. Fu	Fudan University, China	DAAD visit (host: Dr. Jin Zhao, Profs. Xin Wang, Xiangyang Xue), intensive research discussions	Apr, Aug 2011
X. Fu	Nanjing University, China	Visiting Dept of Computer Science and State Key Lab “Novel Software Techniques” (Profs. Zhi-Hua Zhou, Sanglu Lu, Qing Gu, Lijun Chen, Drs. Wenzhong Li, Xiaobing Wu), Dept of Sociology (Prof. Xuwei Zhai), School of Medicine (Prof. Zhiwei Wu), Institute of IoT (Profs. Rong Zhang, Yanqing Lu) etc. Intensive IRTG meetings; Invited talk “NF-TCP: A Network Friendly TCP Variant for Background Delay-Insensitive Applications”	Apr, Aug 2011
F. Tegeler	UCSB, USA	Visiting for 6 months (Profs. Christopher Krueger, Giovanni Vigna)	Mar – Aug 2011
Y. Chen	University of Liege, Belgium	Visiting the Research Unit of Networking (Prof. Guy Leduc), invited talk “Pancake Network Coordinate: Performing Matrix Factorization in Local Clusters”	Mar 2011

Conference and event participations and presentations

Participant	Conference	Detailed information	Date
D. Koll	IEEE GLOBECOM 2011, Houston, TX, USA	Presenting a paper “GEMSTONE: Empowering Decentralized Social Networking with High Data Availability” and attending IEEE ComSoc Social Network Subcommittee meeting	Dec 2011
X. Fu, T. Xu, L. Jiao	ACM/USENIX/IFIP Middleware 2011, Lisbon, Portugal	Presenting a paper “Scaling Microblogging Services with Divergent Traffic Demands” and a poster “Latency-Aware Data Partitioning for Geo-Replicated Online Social Networks”	Dec 2011
X. Fu	ITN Workshop, KOWI (European Liaison Office of the German Research Organisations), Brussels, Belgium	Attending the workshop	Nov 2011
X. Fu	ACM IMC 2011, Berlin, Germany	Attending the conference	Nov 2011
X. Fu	IEEE ICNP 2011, Vancouver, Canada	Presenting an invited paper “LENS: Leveraging Social Networking and Trust to Prevent Spam Transmission”, chairing a session and serving on the panel at FIST workshop; presenting a poster “G-COPSS: A Content Centric Communication Infrastructure for Gaming Applications”, chairing PhD forum.	Nov 2011
X. Fu	IEEE CCW 2011, Hyannis, Cape Cod, MA, USA	Organization committee, session chair of “Social Networks”; chairing TCCC meeting	Oct 2011
X. Fu	IEEE LANMAN 2011, Chapel Hill, NC, USA	Paper “G-COPSS: A Content Centric Communication Infrastructure for Gaming Applications”	Oct 2011
C. Ding	ACM SIGCOMM 2011	Poster “Pomelo: Accurate and Decentralized Shortest-path Distance Prediction in Social Graphs”	Aug 2011

X. Fu	Forum on Future Computing, Changsha, China	Invited speech “Mobile Cloud Computing”	July 2011
J. Chen	EuroView 2011, Wuerzburg, Germany	Presenting an extended abstract “G-COPSS: A Content Centric Communication Infrastructure for Gaming Applications”	Aug 2011
X. Fu	IEEE ICCCN 2010, Maui, Hawaii, USA	Lecturing a tutorial “Extensible IP Signaling: Architecture, Principles, and Applications ” and presenting a paper “Low Overhead Dynamic Spectrum Reallocation in Opportunistic Spectrum Access Networks”	July - Aug 2011
X. Fu	IEEE INFOCOM 2011, Shanghai, China	Session Chair “Social Networks” and “Routing and Forwarding”, chairing TCCC meeting	Apr 2011
K. Zhu	ACM EuroSys 2011, Salzburg, Austria	Presenting a paper “Exploring User Social Behaviors in Mobile Social Applications” at SNS workshop	Apr 2011
S. Hameed	ACM EuroSys 2011, Salzburg, Austria	Presenting an extended abstract “LENS: LEveraging Social Networking and trust to prevent Spam transmission” at the Doctoral Workshop (EuroDW)	Apr 2011
X. Fu	KiVS 2011, Kiel, Germany	Attending the conference	Mar 2011

Project meetings*

Participant	Host institution/location	Detailed information	Date
X. Fu, Y. Zhang, L. Jiao	NET Group, Göttingen	CleanSky consortium meeting (UGOE, GWDG, NTNU, UH, THU, NEC, AT&T)	Nov 2011
X. Fu, D. Koll, L. Jiao	NET Group, Göttingen	Niedersachsen-Israel/DIP project meetings (Technion + UGOE)	June 2011
X. Fu, M. Arumaithurai	Nanjing University, China	Plenary meetings of the IRTG NJU-UGOE team, IRTG draft proposal preparation (1-2 weeks @NJU)	Apr 2011
X. Fu, M. Arumaithurai, W. Li	NET Group, Göttingen	Göttingen plenary meetings for IRTG preparation	Feb, May, Sept, Nov, Dec 2011
X. Fu	Tsinghua University, China	Smart IoT preparation meeting (UGOE, UHH, THU, BUPT, etc), and Green Mobile Cloud project meetings (UGOE, THU)	Apr, July 2011
X. Fu	Nanjing University and Tsinghua University, China	IRTG preparation meetings	Apr, Aug 2011

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

Press news

Source	Detailed information	Date
U Göttingen Press Information	Dr. Wenzhong Li forscht zwei Jahre lang am Institut für Informatik der Universität Göttingen	19.11.2011
U Göttingen Press Information	Göttingen University seals additional cooperation projects with China and India	10.11.2011
Science and Technology Daily	Ten Years of Efforts Behind a Professor (in Chinese)	23.04.2011

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: Somayeh Taheri, Dec 2011)
- Examiner and chair of PhD Committee, Computer Science, University of Göttingen (candidate: Niklas Neumann, May 2011)
- Examiner and chair of PhD Committee, Computer Science, University of Göttingen (candidate: Martin Stiemerling, Feb 2011)
- Coordinator of Planet-Lab membership for University of Göttingen

Awards

- Middleware 2011 Student Traveling Grant (Tianyin Xu)
- GLOBECOM 2011 Student Traveling Grant (David Koll)
- ANCS 2011 Student Traveling Grant (Jiachen Chen)
- SIGCOMM 2011 Student Traveling Grant (Cong Ding)
- EuroSys 2011 Student Traveling Grant (Sufian Hameed)

Elected and Appointed Positions

- Chair, Internet Technical Committee (ITC) of IEEE Communications Society and Internet Society (ISOC)
- Vice Chair, IEEE Communications Society Technical Committee on Computer Communications (TCCC)
- Changjiang Scholar Visiting Professorship, Ministry of Education, China
- Member of Internet Architecture Board (IAB) – Hannes Tschofenig
- Chair of National Emergency Number Association (EENA) NG112 Technical Committee – Hannes Tschofenig
- Co-Chair of IETF Open Authentication Protocol (OAUTH) Working Group – Hannes Tschofenig
- Co-Chair of IETF Peer-to-Peer Streaming Protocol (PPSP) Working Group – Martin Stiemerling
- Co-Chair of IRTF Virtual Network Research Group (VNRG) – Martin Stiemerling

Conference organization

- 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)

- Session Chair, IEEE INFOCOM 2011
- Session Chair and Publicity Co-Chair, IEEE ICNP 2011
- Organizer, Session Chair, IEEE CCW 2011
- Session Chair, IEEE ICDCS 2011 (Yang Chen)
- TPC Co-Chair, IEEE HostPOST 2011@ICPADS 2011 (Yang Chen)

Technical Program Committees

- IEEE INFOCOM 2011
- IEEE ComsNet 2011
- IEEE WoWMoM 2011
- IEEE Computer Communications Workshop (CCW) 2011
- IEEE GLOBECOM 2011 (Yang Chen)
- IEEE ICC 2011 (Niklas Neumann)
- IEEE ICCCN 2011 (Yang Chen)
- IEEE SocNet 2011 (Yang Chen)

Journal editorship

- Associate Editor, IEEE Transactions on Network and Service Management
- Area Editor, Elsevier Computer Communications Journal
- Guest Editors, Elsevier Computer Networks Journal Special Issue “Measurement-based Optimization of P2P Networking and Applications” (Xiaoming Fu and Yang Chen)
- Guest Editor, IET Communications Special Issue “Peer-to-Peer Systems and Online Social Networking” (Yang Chen)

Journal reviews

- IEEE/ACM Transactions on Networking
- IEEE Journal on Selected Areas in Communications (Yang Chen)
- IEEE Transactions on Wireless Communications (Niklas Neumann, Xiaoming Fu)
- IEEE Transactions on Vehicular Technology
- IEEE Computer
- Computer Networks
- Computer Communications (Niklas Neumann, Jun Lei, Xiaoming Fu)
- Journal of Computer Science and Technology