

BIANNUAL REPORT 2016-2017

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 seventh issue of this series, and summarizes those of the years of 2016-2017.

Group Members

Sripriya Srikant Adhatarao, Shichang Ding, Jacopo de Benedetto, Jiaquan Zhang, and Zhenxuan Wang joined the NET group as PhD students in April 2016, November 2016, December 2016, October 2017 and October 2017, respectively. Dr. Xu Chen and Dr. Hong Huang moved back to China, starting their new career as faculty member at Sun Yat-Sen University in September 2016, and Huazhong University of Science and Technology in September 2017, respectively. Dr. Mayutan Arumaithurai completed his Habilitation in November 2017. Dr. Ren Xu, Dr. Hong Huang, and Dr. Antonietta Stango completed their PhD theses in June, September and November 2016, respectively. Prof. Shixiong Wang completed his 1-year research visit at the NET group (2015-2016); Enhuan Dong completed his 1-year joint PhD study at the NET group (2016-2017) and returned to Tsinghua University for finalizing his PhD thesis. Federica Poltronieri left the NET group and moved to Bayreuth in June 2017 due to family reasons; Tina Bockler joined the NET group in September 2017 as new secretary. Also, several master and bachelor student assistants worked on various projects and thesis work; they are an important part of the team.

Ms. Rongrong Zheng (Universite Paris V – Rene Descartes, France, 4 months in July-Dec 2016), Dr. Shang Gao (Deakin University, Australia, 4 months in July-Nov 2016), Ms. Yue Wang (BUPT, one month in June 2016), Dr. Konglin Zhu (BUPT, one month in July-Aug 2016), Ms. Yanling Bu, Mr. Chao Jia, Mr. Jiankun Liu, Ms. Li Zhang (NJU, two months in Nov-Dec 2016), Prof. Wenzhong Li (NJU, 2 weeks in Aug 2016), Prof. Haijian Liu (NJU, 3 weeks in Sept 2016), Mr. Xiaoda Zhang (NJU, 2 weeks in May 2016), Mr. Xiao Zhang (NJU, 2 months in July-Aug 2016), Prof. Jar-Der Luo (Tsinghua, 9 weeks in July-Sept 2016), Prof. Yong Li (Tsinghua, 10 weeks in July-Sept 2016), Prof. Jinlei Jiang (Tsinghua, 10 days in October 2016), Ms. Zhen Tu (Tsinghua, 8 weeks in July-Aug 2016), Mr. Fengli Xu (Tsinghua, 2.6 months in July-Sept 2016), Mr. Syed Shah-e- Mardan Ali Rizvi (Tsinghua, 2 months in Feb-Apr 2017), Mr. Kunhao Yang (Tsinghua, 6 weeks in Nov 2016-Jan 2017), Ms. Yajuan Zhang (Tsinghua, 2.8 months in July-Sept 2016), Mr. Zhi Zhou (Huazhong University of Science and Technology, 3 months in Aug-Nov 2016), Prof. Yang Chen (Fudan, 2 months in July-Sept 2016), Mr. Lei Huang (Fudan, 2.1 months in July-Sept 2016), Kun Qiu (Fudan, 1.5 months in Nov-Dec 2016), Zhou Zhuang and Hao Zhao (Fudan, July-Sept 2017) spent mid-term research visits at NET group, contributing to its research activities.

By the end of year 2017, the research group comprises 1 professor, 2 senior researchers/postdoc fellows, 12 PhD students, as well as a couple of master and bachelor students. See Table 1 for detailed information.

Table 1: Member of Computer Networks Group (as of 31.12.2017):

Administrative staff	Head	Senior Researchers	Research assistants/PhD students	Adjunct researchers /visitors	BSc/MSc student assistants
Secretaries: A. Kadziora, T. Bockler System administrator: G. Krull	Prof. Dr. X. Fu	Dr. M. Arumathurai, Dr. D. Koll	Z. Wang, J. Zhang, S. Ding, J. de Benedetto, S. Adhatarao, T. Zhao, O. Lotf, A. Prasad, S. Kulkarni, H. Tschofenig (extern), Ahsan Malik (extern), A. Silvestro (extern), B. Zhao, F. Zhang (co-supervised with R. Yahyapour), S. Chatterjee (co-supervised with L. Kolbe)	Dr. Y. Chen, Dr. S. Sigg, Dr. J. Chen, Dr. X. Chen, Dr. H. Huang, Dr. D. Yin, Mr. E. Dong	S. Jerratsch, A. Zarei, Y. Chen, S. Nikelski, G. Martinez, T. Emadinia

Teaching and Supervision

During 2016-2017 the Group has provided the following courses:

Lectures:

Computer Networks, 4 ECTS

Introduction to Software-Defined Networking, 5 ECTS

Specialization Software-Defined Networking, 5 ECTS

Computer Networks, 4 ECTS (exam only)

Advanced Computer Networks, 6 ECTS

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

WS2016/17, WS2017/18

WS2016/17, WS2017/18

WS2016/17, WS2017/18

SS2016, SS2017

SS2016, SS2017

Exercise classes:

Computer Networks

WS2016/17, WS2017/18

Lab courses:

Practicum Advanced Networking, 6 ECTS

SS2016, WS2016/17, SS2017, WS2017/18

Practicum Networking Lab, 6 ECTS

SS2016, WS2016/17, SS2017, WS2017/18

Seminars:

Adv. Topics in Mobile Communications (Mobile Big Data), 6 ECTS

SS2016

Adv. Topics in Computer Networking, 6 ECTS

WS2016/17

Internet Technologies, 4 ECTS

SS2016, WS2016/17, SS2017, WS2017/18

Advanced Topics in Social Network and Big Data Methods, 5 ECTS

SS2016

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:

- Architectures, protocols, mechanisms and applications for cloud computing and data centers, including resource and service management, energy efficiency, data delivery, software-defined networks, network function virtualization, cloud systems, applications and services. This has been conducted in collaboration with Microsoft Research, Deutsche Telekom, Nokia/Bell Labs, Cisco, Ericsson, NEC, UC Riverside, U. Oregon, University of Paris – Marie Curie (Paris 6), BUPT, Fudan University, Tsinghua University, and Nanjing University etc.
- Future Internet architectures and protocols, including information-centric networking, software-defined networking, reliability and congestion control, pub/sub architecture, disaster management, measurement, and related security mechanisms for supporting large-scale content delivery and other applications over the Internet. This area has been in collaboration with UC Riverside, UCLA, Columbia University, University College London, University of Rome “Tor Vergata”, Swedish Institute of Computer Science, KDDI, Panasonic, Cisco, Ericsson, NEC, Bell Labs, Orange Labs, Osaka University, University of Tokyo, Waseda University, NICT, Fudan University, Tsinghua University, and Nanjing University, etc.
- Social networks/social computing, including socio-aware networking/computing infrastructure, mobile social networks, as well as social behavior studies and social influence, in collaboration with researchers from Göttingen (including sociologists, socio-psychologists, physicists and epidemiologists), nationally (MPI-DS, MPI-SWS, T-Labs, L3S/University of Hannover, University of Frankfurt) and internationally (University Oregon, University of Cambridge, Swedish Institute of Computer Science, Bell Labs, Tsinghua University, Peking University, Fudan University, Nanjing University, Nankai University etc).
- Mobile computing, pervasive/social sensing and applications e.g., in smart cities and energy-efficient buildings, leveraging machine learning (in particular compressive sensing) and data mining techniques where appropriate, in cooperation with Aalto University (Finland), Uppsala University (Sweden), University of Liege (Belgium), University of Kent (UK), IMT Telecom-SudParis, Orange Labs (France), Hong Kong University of Science and Technology, Tsinghua University, Nankai University, Nanjing University, University of Science and Technology of China (China), NEC, Toyota, National Institute of Informatics, Nagoya University (Japan), Karlsruhe Institute of Technology, as well as the Chair of Bioclimatology, Chair of Information Management, Chair of Human Resource Management, and Institute of Geography at the University of Göttingen and Medical Center Göttingen.

Some funded projects in 2016-2017 include:

- “Detection and prevention of insider data exfiltration in big data environments”, sponsored by DAAD-PPP Australia
- ICN2020 – “Advancing ICN towards real-world deployment through research, innovative applications, and global scale experimentation”, sponsored by EU-Japan H2020 ICT Cooperation program (Coordinated by NET group)
- GreenICN – “Architecture and Applications of Green Information Centric Networking”, sponsored by EU-Japan FP7 ICT Cooperation program (Coordinated by NET group)
- MobileCloud – “Linking Sino-European Research Institutions in the Mobile Cloud Computing Era” sponsored by EU FP7 Marie Curie IRSES program (Coordinated by NET group)

- CleanSky – “Network for Cloud Computing Eco-System”, sponsored by EU FP7 Marie Curie Initial Training Network program (Coordinated by NET group)
- DFG – DFG/NSFC International Symposium on Social Computing, sponsored by Sino-German Center for Research Promotion
- SWZ – Simulation Science Center, sponsored by State Lower Saxony and Volkswagen Foundation
- Social Networks in Big Data, sponsored by Lindemann Foundation
- Socially-Motivated Cooperative Device-to-Device Communications, sponsored by Humboldt Foundation
- Software-Defined Clouds, sponsored by DAAD Scholarship program
- Mobile Big Data, sponsored by CSC Scholarship program
- Social Network Analysis, sponsored by CSC Scholarship program
- Mobile social networks, sponsored by CSC Scholarship program

Publications, Technical Reports and Theses

Edited Book

1. Xiaoming Fu, Jar-Der Luo, Margarete Boos (eds.), **Social Network Analysis: Interdisciplinary Approaches and Case Studies**, CRC Press, Taylor & Francis Group, Mar 2017. ISBN 9781498736640.

Editorials

2. Xiaoming Fu, Michael Welzl, Volker Hilt, Dieter Hogrefe, David Koll, Ruichuan Chen (eds), Proc. of 20th IEEE/ACM/GI/ITG Conference on Networked Systems (NetSys'17), Göttingen, Germany, Mar 13-16, 2017
3. Tohru Asami, Xiaoming Fu, Jeff Burke, Dario Rossi, Ioannis Psaras. Proc. of 3rd ACM Conference on Information-Centric Networking (ICN'16), Kyoto, Japan, Sept 26-28, 2016. ISBN 978-1-4503-4467-8
4. Jun Bi, Sonia Fahmy, Xiaoming Fu, Keisuke Uehara, Guang Cheng, Serge Fdida (eds.), ACM Conference on Future Internet (CFI 2016), Nanjing, China, June 15-17, 2016. ISBN 978-1-4503-4181-3
5. Xiaoming Fu, Andrea Passarella, Daniele Quercia, Alessandra Sala, Thorsten Strufe (Eds.), Online Social Networks, Computer Communications, Elsevier, 73(B): 163-346, Jan. 2016.
6. Jun Guo, Sung Ho Cho, Xiaoming Fu, Nirwan Ansari, and Hong Ji (Eds.), Mobile Internet: Content, Security and Terminal. International Journal of Communications Systems, Wiley, DOI: 10.1002/dac.3092, 29(14), Sept 2016.

Papers in Peer-Reviewed Journals

7. Hong Huang, Yuxiao Dong, Jie Tang, Hongxia Yang, Nitesh V. Chawla, Xiaoming Fu, Will Triadic Closure Strengthen Ties in Social Networks? **ACM Transactions on Knowledge Discovery from Data (TKDD)**, accepted.
8. Lingjun Pu, Xu Chen, Jingdong Xu, Xiaoming Fu, Content Retrieval at the Edge: A Social-aware and Named Data Cooperative Framework, **IEEE Transactions on Emerging Topics in Computing (TETC)**, DOI: 10.1109/TETC.2016.2581704, in press.
9. A Distributed Authentication and Authorization Scheme for In-Network Big Data Sharing, Ruidong Li, Hitoshi Asaeda, Jie Li, Xiaoming Fu, **Digital Communications and Networks**, DOI: 10.1016/j.dcan.2017.06.001, Elsevier, in press.
10. Qingyuan Gong, Yang Chen, Xinlei He, Zhou Zhuang, Tianyi Wang, Hong Huang, Xin Wang, Xiaoming Fu, DeepScan: Exploiting Deep Learning for Malicious Account Detection in Location-Based Social Networks, **IEEE Communications Magazine**, Feature Topic on Mobile Big Data for Urban Analytics, 56(1), Jan. 2018.

11. Song Yang, Philipp Wieder, Ramin Yahyapour, Stojan Trajanovski, Xiaoming Fu, Reliable Virtual Machine Placement and Routing in Clouds, **IEEE Transactions on Parallel and Distributed Systems**, 28(10): 2965-2978, Oct 2017.
12. David Koll, Jun Li, Xiaoming Fu, The Good Left Undone: Advances and Challenges in Decentralizing Online Social Networks, **Computer Communications**, 108(1): 36-51, Elsevier, Aug. 2017.
13. Sripriya Srikant Adhatarao, Mayutan Arumathurai, Dirk Kutscher, Xiaoming Fu, ISI: Integrate Sensor Networks to Internet with ICN, **IEEE Internet of Things Journal**, DOI: 10.1109/JIOT.2017.2741923, Aug. 2017.
14. Song Yang, Philipp Wieder, Ramin Yahyapour, Xiaoming Fu, Energy-Aware Provisioning in Optical Cloud Networks. **Computer Networks**, 118: 78-95, Elsevier, May 2017.
15. Lingjun Pu, Xu Chen, Jingdong Xu, Xiaoming Fu, Crowd Foraging: A QoS-oriented Self-organized Mobile Crowdsourcing Framework over Opportunistic Networks, **IEEE Journal on Selected Areas in Communications (JSAC)**, Special Issue on Human-In-The-Loop Mobile Networks, 35(4): 1-15, Apr. 2017.
16. Yang Chen, Shining Wu, Jun Li, Xiaoming Fu, NCSHield: Protecting Decentralized, Matrix Factorization-Based Network Coordinate Systems, **IEEE Transactions on Services Computing**, 10(2): 244-257, Mar.-Apr. 2017.
17. Lingjun Pu, Xu Chen, Jingdong Xu, Xiaoming Fu, D2D Fogging: An Energy-efficient and Incentive-aware Task Offloading Framework via Network-assisted D2D Collaboration, **IEEE Journal on Selected Areas in Communications (JSAC)**, Series on Green Communications and Networking, 34(12): 3887-3901, Nov 2016
18. Xu Chen, Lei Jiao, Wenzhong Li, Xiaoming Fu, Efficient Multi-User Computation Offloading for Mobile-Edge Cloud Computing, **IEEE/ACM Transactions on Networking**, 24(5): 2795-2808, Oct 2016
19. Konglin Zhu, Wenting Zhi, Lin Zhang, Xu Chen, Xiaoming Fu, Social-Aware Incentivized Caching for D2D Communications. **IEEE Access**, 4: 7585-7593, Oct 2016
20. Farshid Hassani Bijarbooneh, Wei Du, Edith Ngai, Xiaoming Fu, Jiangchuan Liu, Cloud-Assisted Data Fusion and Sensor Selection for Internet-of-Things, **IEEE Internet of Things Journal**, 3(3): 257-268, June 2016.
21. Bolei Zhang, Zhuzhong Qian, Wenzhong Li, Bin Tang, Sanglu Lu, Xiaoming Fu, Budget Allocation for Maximizing Viral Advertising in Social Networks, *Journal of Computer Science and Technology*, 31(4): 759-775, Springer-Verlag, April 2016.
22. Xiaoming Fu, Signaling in IP-based Networks: Retrospect and Prospect -- From QoS Resource Reservation to Software-Defined Networking, **IEEE Internet Computing**, 20(3): 80-88, May 2016.
23. Lei Jiao, Jun Li, Tianyin Xu, Wei Du, Xiaoming Fu, Optimizing Cost for Online Social Networks on Geo-Distributed Clouds, **IEEE/ACM Transactions on Networking**, 24(1): 99-112, Jan. 2016.

Papers in Peer-Reviewed International Conferences and Workshops

24. Hong Huang, Bo Zhao, Hao Zhao, Zhou Zhuang, Zhenxuan Wang, Xiaoming Yao, Xinggang Wang, Hai Jin and Xiaoming Fu, A Cross-Platform Consumer Behavior Analysis of Large-Scale Mobile Shopping Data, *The Web Conference (WWW 2018)*, Industry Track, Lyon, France, ACM, April 2018.
25. Hao Zhao, Qingyuan Gong, Yang Chen, Jingrong Chen, Yong Li and Xiaoming Fu, This Place is Swarming: Using a Mobile Social App to Study Human Traffic in Cities, 5th IEEE International Workshop on Crowd Assisted Sensing, Pervasive Systems and Communications (CASPer'18), in conjunction with IEEE PerCom 2018, Athens, Greece, IEEE, March 2018.
26. Sripriya Srikant Adhatarao, Mayutan Arumathurai, Dirk Kutscher, Xiaoming Fu, NeMoI: Network Mobility in ICN, In *Proceedings of Tenth International Conference on COMMunication Systems & NETWORKS (COMSNETS) in 2018*, IEEE, January 2018.
27. Alessio Silvestro, Roberto Bifulco, Fabian Schneider, Xiaoming Fu, Jussi Kangasharju, MISE: Middleboxes SElection for Multi-Domain Service Function Chains (SFCs), *ACM Cloud-Assisted Networking Workshop (CAN 2017)*, in conjunction with ACM CoNEXT 2017, Korea, ACM, December 2017.
28. Fei Zhang, Bo Zhao, Xiaoming Fu, Ramin Yahyapour, Controlling Migration Performance of Virtual Machines According to User's Requirements, *ACM Cloud-Assisted Networking Workshop (CAN 2017)*, in conjunction with ACM CoNEXT 2017, Korea, ACM, December 2017.

29. Xiang Lan, Yuezhi Zhou, Di Zhang, Xinggong Wang, Xiaoming Yao, Xiaoming Fu, Cloud-Assisted Trajectory Data Management and Analysis: A Case Study, ACM CoNEXT Workshop on Cloud-Assisted Networking (CAN 2017), Seoul, Korea, Dec. 2017.
30. David Koll, Dieter Lechler and Xiaoming Fu, SocialGate: Managing Large-Scale Social Data on Home Gateways, Proceedings of the IEEE 2017 International Workshop on Networking BigData Oriented Systems (NetBOS) / ML&AI Workshop, co-located with IEEE ICNP 2017, Toronto, Canada, Oct 2017.
31. Enhuan Dong, Xiaoming Fu, Mingwei Xu, LAMPS: A Loss Aware Scheduler for Multipath TCP over Highly Lossy Networks, 42nd Annual IEEE Conference on Local Computer Networks (LCN 2017), Singapore, IEEE, October. (**Best Paper Runner-up**)
32. Sripriya Srikant Adhatarao, Mayutan Arumaithurai, Xiaoming Fu, FOGG: A Fog Computing Based Gateway to Integrate Sensor Networks to Internet, First International Workshop on Softwarized Infrastructures for 5G and Fog Computing (Soft5 2017), in conjunction with ITC 29, Genoa, Italy, IEEE, September 2017.
33. Sameer G Kulkarni, Wei Zhang, Jinho Hwang, Shriram Rajagopalan, K. K. Ramakrishnan, Timothy Wood, Mayutan Arumaithurai, Xiaoming Fu, NFVnice: Dynamic Backpressure and Scheduling for NFV Service Chains, ACM SIGCOMM 2017, Los Angeles, CA, Aug 2017.
34. Abhinandan S. Prasad, Mayutan Arumaithurai, David Koll, Xiaoming Fu, RAERA: A Robust Auctioning Approach for Edge Resource Allocation, ACM SIGCOMM 2017 International Workshop on Mobile Edge Communications (MECOMM 2017), August 2017.
35. Dennis Grewe, Marco Wagner, Mayutan Arumaithurai, Ioannis Psaras, Dirk Kutscher, Information-centric mobile edge computing for connected vehicle environments: Challenges and research directions, ACM SIGCOMM 2017 International Workshop on Mobile Edge Communications (MECOMM 2017), August 2017.
36. Ioannis Psaras, Vasilis Sourlas, Denis Shtefan, Sergi Rene, Mayutan Arumaithurai, Dirk Kutscher, George Pavlou, On the feasibility of a user-operated mobile content distribution network, Proc of 2017 IEEE 18th International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM), June 2017.
37. Ruidong Li, Hitoshi Asaeda, Jie Li, Xiaoming Fu, A Verifiable and Flexible Data Sharing Mechanism for Information-Centric IoT, IEEE International Conference of Communications (ICC 2017), Paris, France, June 2017.
38. David Koll, Martin Schwarzmaier, Jun Li, Xiang-Yiang Li, Xiaoming Fu, Thank You For Being A Friend: An Attacker View on Online-Social-Network-based Sybil Defenses, The 9th International Workshop on Hot Topics in Planet-Scale Mobile Computing and Online Social Networking (HotPOST'17), in conjunction with IEEE ICDCS 2017, Atlanta, GA, June 2017. (**Best paper award**)
39. Argyrios G. Tasiopoulos, Sameer Kulkarni, Mayutan Arumaithurai, Ioannis Psaras, K. K. Ramakrishnan, Xiaoming Fu, George Pavlou, DRENCH: A Semi-Distributed Resource Management Framework for NFV based Service Function Chaining, IFIP Networking 2017, Stockholm, Sweden, June 2017.
40. Sameer Kulkarni, Mayutan Arumaithurai, K. K. Ramakrishnan, Xiaoming Fu, REARM: Renewable Energy Based Resilient Deployment of Virtual Network Functions, 26th European Conference on Networks and Communications (EuCNC 2017), Oulu, Finland, IEEE, June 2017.
41. Song Yang, Xiaoming Fu, Philip Wieder, Muzzami Aziz, Ramin Yahyapour, Latency-Sensitive Data Allocation for Cloud Storage, 15th IFIP/IEEE International Symposium on Integrated Network Management (IM 2017), Lisbon, Portugal, IEEE, May 2017.
42. Abhinandan S. Prasad, David Koll, Jesus Omana Iglesias, Jordi Arjona Aroca, Volker Hilt and Xiaoming Fu, Optimal Resource Configuration of Complex Services in the Cloud, 17th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (IEEE/ACM CCGrid 2017), Madrid, Spain, IEEE, May 2017.
43. Fei Zhang, Xiaoming Fu and Ramin Yahyapour, CBase: A New Paradigm for Fast Virtual Machine Migration across Data Centers, 17th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (IEEE/ACM CCGrid 2017), Madrid, Spain, IEEE, May 2017.
44. Chen Zhang, Yuedong Xu, Yipeng Zhou, Xiaoming Fu, On the "Familiar Stranger" Phenomenon in a Large-scale VoD System, 9th IEEE International Workshop on Network Science for Communication Network (NetSciCom 2017), in conjunction with IEEE INFOCOM 2017, Atlanta, USA, IEEE, May 2017.

45. Fengli Xu, Zhen Tu, Yong Li, Pengyu Zhang, Xiaoming Fu and Depeng Jin, Trajectory Recovery From Ash: User Privacy Is NOT Preserved in Aggregated Mobility Data, Proceedings of 26th International World Wide Web Conference (**WWW 2017**), Perth, Australia, ACM, April 2017.
46. Yang Chen, Cong Ding, Jiyao Hu, Ruichuan Chen, Pan Hui, Xiaoming Fu, Building and Analyzing a Global Co-Authorship Network Using Google Scholar Data, Proceedings of 26th International World Wide Web Conference (WWW 2017) Companion, 4th WWW Workshop on Big Scholarly Data (BigScholar 2017), Perth, Australia, ACM, April 2017.
47. Osamah Barakat, David Koll, Xiaoming Fu, Gavel: Software-defined Network Control with Graph Databases, 20th Conference on Innovations in Cloud, Internet and Networks (ICIN 2017), Paris, France, IEEE, Mar 2017.
48. Sameer Kulkarni, Mayutan Arumaithurai, Xiaoming Fu, K. K. Ramakrishnan, Neo-NSH: Towards Scalable and Efficient Dynamic Service Function Chaining of Elastic Network Functions, 20th Conference on Innovations in Cloud, Internet and Networks (ICIN 2017), Paris, France, IEEE, March 2017.
49. Fei Zhang, Xiaoming Fu, Ramin Yahyapour, LayerMover: Storage Migration of Virtual Machine across Data Centers Based on Three-layer Image Structure, 24th IEEE International Symposium on Modelling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS 2016), London, UK, Sept 2016.
50. Jiachen Chen, Mayutan Arumaithurai, Xiaoming Fu, K. K. Ramakrishnan, SAID: A Control Protocol for Scalable and Adaptive Information Dissemination in ICN, ACM Conference on Information-Centric Networking (**ICN 2016**), Kyoto, Japan, ISBN 978-1-4503-4467-8/16/09, Sept 2016.
51. Jiachen Chen, Mayutan Arumaithurai, Xiaoming Fu, K. K. Ramakrishnan, CNS: Content-oriented Notification Service for Managing Disasters, ACM Conference on Information-Centric Networking (**ICN 2016**), Kyoto, Japan, Sept 2016.
52. Sripriya Srikant Adhatarao, Jiachen Chen, Mayutan Arumaithurai, Xiaoming Fu, K. K. Ramakrishnan, Comparison of Naming Schema in ICN, the 22nd IEEE International Symposium on Local and Metropolitan Area Networks (LANMAN 2016), Rome, Italy, IEEE, June 2016.
53. Atsushi Tagami, Tomohiko Yagyu, Kohei Sugiyama, Mayutan Arumaithurai, Kenichi Nakamura, Toru Hasegawa, Tohru Asami, KK Ramakrishnan, Name-based push/pull message dissemination for disaster message board, the 22nd IEEE International Symposium on Local and Metropolitan Area Networks (LANMAN 2016), Rome, Italy, IEEE, June 2016.
54. Shixiong Wang, Xiaoming Fu, Opinion dynamics on online-offline interacting networks: media influence and antagonistic interaction, 8th ACM International Workshop on Hot Topics in Planet-scale mObile computing and online Social neTworking (HotPOST 2016), in conjunction with ACM MobiHoc 2017, pages 55-60, ACM, June 2016.
55. Yuan Zhang, Jinyao Yan, Xiaoming Fu, Reservation-based Resource Scheduling and Code Partition in Mobile Cloud Computing, 2016 IEEE Conference on Computer Communications Workshops (INFOCOM WKSHPS): 2016 IEEE INFOCOM Green and Sustainable Networking and Computing (GSNC) Workshop, IEEE, April 2016.
56. Lingjun Pu, Xu Chen, Jingdong Xu, Xiaoming Fu, Crowdlet: Optimal Worker Recruitment for Self-Organized Mobile Crowdsourcing, 35th Annual IEEE International Conference on Computer Communications (**INFOCOM 2016**), Mar 2016.
57. Chao Wu, Xu Chen, Yuezhi Zhou, Ningyuan Lee, Xiaoming Fu, Yaoxue Zhang, Spice: Socially-Driven Learning-Based Mobile Media Prefetching, IEEE **INFOCOM 2016**, Mar 2016.

Book Chapters

58. Jar-Der Luo, Xiao Han, Ronald Burt, Chaowen Zhou, Meng-Yu Cheng, Xiaoming Fu, The Measurement of Guanxi Circles - Using Qualitative Study to Modify Quantitative Measurement, in: X. Fu, J.-D. Luo, M. Boos (eds.), Social Network Analysis: Interdisciplinary Approaches and Case Studies, Chapter 4, CRC Press, Taylor & Francis Group, ISBN 9781498736640, Mar 2017.
59. Xiaoming Fu, Jar-Der Luo, Margarete Boos, Methods for Interdisciplinary Social Network Studies, in: X. Fu, J.-D. Luo, M. Boos (eds.), Social Network Analysis: Interdisciplinary Approaches and Case Studies, Chapter 1, CRC Press, Taylor & Francis Group, ISBN 9781498736640, Mar 2017.

60. Wenzhong Li, Sanglu Lu, Konglin Zhu, Xiao Chen, Jan Nagler, Xiaoming Fu, Information Dissemination in Social-Featured Opportunistic Networks, in: X. Fu, J.-D. Luo, M. Boos (eds.), *Social Network Analysis: Interdisciplinary Approaches and Case*, Chapter 13, CRC Press, Taylor & Francis Group, ISBN 9781498736640, Mar 2017.
61. Hong Huang, Jie Tang, Lu Liu, Jar-Der Luo, Xiaoming Fu, Analysis and Prediction of Triadic Closure in Online Social Networks, in: X. Fu, J.-D. Luo, M. Boos (eds.), *Social Network Analysis: Interdisciplinary Approaches and Case*, Chapter 5, CRC Press, Taylor & Francis Group, ISBN 9781498736640, March 2017.
62. Konglin Zhu, Xiaoming Fu, Wenzhong Li, Sanglu Lu, Jan Nagler, How Do Online Social Networks Grow?, in: X. Fu, J.-D. Luo, M. Boos (eds.), *Social Network Analysis: Interdisciplinary Approaches and Case*, Chapter 11, CRC Press, Taylor & Francis Group, ISBN 9781498736640, March 2017.

(Extended) Abstracts, Posters and Demos

63. Tao Zhao, Hong Huang, Xiaoming Fu, Socioeconomic Status Prediction Using Mobile Big Data (abstract), Workshop on "Kultur, Stadt und Netzwerke - Positionen, Verhältnisse und Herausforderungen für die Netzwerkforschung", Darmstadt, Germany, January 2018
64. Jacopo De Benedetto, Mayutan Arumathurai, Xiaoming Fu, ICN personalized global-scale testbed using GTS. Proc. ACM ICN 2017, demo session, pages 208-209, Berlin, Germany, Sept 2017.
65. Hong Huang, Shichang Ding, Taoxiong Liu, Xu Wang, Xiaoming Fu, Understanding Urban Mobility from Public Transportation Perspective Using Smart-Card Data: The Case of Shanghai (extended abstract), INSNA Sunbelt 2017, Beijing, China, June 2017
66. Hong Huang, Lu Zheng, Xiaoming Fu, The Life Cycle of One Triad: An Alternative Perspective from Weibo (extended abstract), INSNA Sunbelt 2017, Beijing, China, June 2017
67. Alessio Silvestro, Roberto Bifulco, Fabian Schneider, Xiaoming Fu, Jussi Kangasharju, Is today's DNS the right solution for middleboxes selection? Proceedings of the 4th Workshop on CrossCloud Infrastructures & Platforms (CrossCloud 2017), poster session, in conjunction with ACM EuroSys 2017, Belgrade, Serbia, April 2017.
68. Christoph Menzel, Xiaoming Fu, Lutz Kolbe, Xu Wang, Ruhua Zhang, Chong Liu, and Yuezhi Zhou, MULMOD - MULTIMODal Sustainable Mobility for Smart Cities in China and Germany, 14th International Conference on Embedded Wireless Systems and Networks (EWSN 2017) poster session, Uppsala, Sweden, ACM, February 2017.
69. Fabian Froese, Xiaoming Fu, Samuel Davies, Hong Huang, Zhenxuan Wang, Which Role Does the Social Network of Expatriates Play in their Career Development?, Proceedings of 42nd Annual Conference of European International Business Academy, Vienna, Austria, December 2016.
70. Osamah Barakat, David Koll, Xiaoming Fu, Gavel: Towards a Graph Database Defined Network, Proceedings of IEEE International Conference on Network Protocols, poster session, Singapore, IEEE, November 2016.
71. Sameer Kulkarni, Mayutan Arumathurai, Argyriou G. Tasiopoulos, Yiaonis Psaras, K. K. Ramakrishnan, Xiaoming Fu, George Pavlou, Name enhanced SDN framework for service function chaining of elastic network functions, Proc of IEEE INFOCOM Workshops 2016, pages 45-46 (poster), IEEE, April 2016.

Technical Reports

72. Tao Zhao, Hong Huang, Xiaoming Fu, QALeaderRank: Identifying Topical Opinion Leaders in Social Community Question Answering, Technical Report No. IFI-TB-2017-01, Institute of Computer Science, University of Göttingen, Göttingen, Germany, ISSN 1611-1044, December 2017.
73. Haitao Wang, Sripriya Srikant Adhatarao, Mayutan Arumathurai, Xiaoming Fu, COPSS-lite: Lightweight ICN Based Pub/Sub for IoT Environments, arXiv:1706.03695, June 2017.
74. Lingjun Pu, Xu Chen, Jingdong Xu, Xiaoming Fu, D2D Fogging: An Energy-efficient and Incentive-aware Task Offloading Framework via Network-assisted D2D Collaboration, Technical Report IFI-TB-2016-02, Institute of Computer Science, University of Göttingen, Germany, October 2016.

Habilitation Thesis

75. Mayutan Arumaithurai, An Intelligent and Powerful Data Plane Support To Enhance Future Communication, Habilitation Thesis, Faculty of Mathematics and Computer Science, University of Göttingen, Göttingen, Germany, November 2017

PhD Dissertations

76. Antonietta Stango, Increasing the Robustness of Active Upper Limb Prostheses, PhD Dissertation, Faculty of Mathematics and Computer Science, University of Göttingen, Göttingen, Germany, November 2016
77. Hong Huang, Triadic Closure and Its Influence in Social Networks - A Microscopic View of Network Structural Dynamics, PhD Dissertation, Faculty of Mathematics and Computer Science, University of Göttingen, Göttingen, Germany, September 2016
78. Ren Xu, Short-Latency Brain-Computer Interface Using Movement-Related Cortical Potentials, PhD Dissertation, Faculty of Mathematics and Computer Science, University of Göttingen, Göttingen, Germany, June 2016
79. Lingjun Pu, On Service Design and Key Issues in 5G Edge Network Architecture, PhD Dissertation, Department of Computer Science and Security, Nankai University, Tianjin, China, June 2016

Master Theses

80. Md Toufiqul Islam, A Comparison of Several Video Related Aspects Between CICN and NDN Platforms on Top of GTS, Master Thesis, Internet Technologies and Information Systems, Technische Universität Braunschweig, Braunschweig, Germany, November 2017.
81. Waqas Awan, Evaluation of ChronoChat sync-state delay using GEANT Testbed Service, Master Thesis, Internet Technologies and Information Systems, University of Göttingen, Göttingen, Germany, September 2017
82. Dieter Lechler, Decentralizing Online Social Networks via Home Gateways, Master Thesis, Institute of Computer Science, University of Göttingen, Göttingen, Germany, June 2017
83. Martin Schwarzmaier, Sybils in Disguise: An Attacker View on OSN-based Sybil Defenses, Master Thesis, Institute of Computer Science, University of Göttingen, Göttingen, Germany, Mar 2017
84. Fabian Meyer, Feasibility study of a HTML5 version of a Flash application, Master Thesis, Institute of Computer Science, University of Göttingen, Göttingen, Germany, Jan 2017
85. Benno Martim Schubert, Design, Implementation and Comparison Evaluation Of An ICN-based Architecture For Disaster Scenarios, Master Thesis, Institute of Computer Science, University of Göttingen, Göttingen, Germany, June 2016

Bachelor Theses

86. Marcus Khalil, Mining fluctuations in customer satisfaction from online reviews - A case study of yelp, Faculty of Economic Sciences, University of Göttingen, Göttingen, Germany, Sept 2017
87. Leon Tan, Denial of Service Resistance Using Fuzzy Logic in Ant Colony Optimization Based Routing for MANETs, Institute of Computer Science, University of Göttingen, Göttingen, Germany, May 2017

Scientific Contacts

Incoming short-term researcher visits

Incoming visitors	Institution (from)	Detailed information	Date
Alessio Silvestro	NEC Europe, Heidelberg, Germany	Visiting NET group and collaborating on research work	Feb 2016, Dec 2017-Feb 2018
Prof. Zongkai Shi,	Tsinghua University, China	Visited NET group for 4 days, giving talks at Tsinghua-Göttingen Workshop on Social Big Data; meeting Prof.	Nov 2017

Jar-Der Luo, Jie Tang		Beisiegel (President of University of Göttingen) for long-term collaborations	
Profs. Gangshan Wu, Fangmin Song, Wenzhong Li	Nanjing University, China	Visited NET group for one week, giving talks at Nanjing-Göttingen Workshop on Social Computing	Nov 2017
Dr. Narisu Tao	E.ON Advanced Analytics and Data Lab, Germany	Visited NET group and giving a talk at Nanjing-Göttingen Workshop on Social Computing	Nov 2017
Profs. Guochen Zhang, Zhiliang Zhu, Yihao Ding, Yingying Wang	Northeastern University, China	Visited NET group, meeting Dr. Uwe Muuss (Director of Göttingen International) for possible collaborations	Nov 2017
Dr. Bingyang Liu	Huawei Central Research Institute, China	Visited NET group and discussed potential collaboration in EU projects	Oct 2017
Dr. Zhiyong Wang	Heidelberg University, Germany	Visited NET group, giving an invited talk “Integration of open data to support route planning” and discussed potential collaborations	July 2017
Dr. Dirk Kutscher	Huawei Research Munich, Germany	Visiting NET group and discuss collaborations	Feb 2017
Dr. Ruidong Li	NICT, Japan	Visiting NET group for one week and collaborated on ICN and big data	Nov-Dec 2016
Mr. Jihong Yu	University of Paris- Sud XI, France	Visiting NET group and giving a talk “Tag Counting and Monitoring in Large-scale RFID Systems: Theoretical Foundation and Algorithm Design” at the Computer Science Colloquium	Oct 2016
Prof. Jinlei Jiang	Tsinghua University, China	Visiting NET group for 10 days; gave an invited talk and discussed potential collaborations	Oct 2016
Profs. Zongkai Shi, Jar-Der Luo, Jie Tang	Tsinghua University, China	Visited NET group for 2 days; meeting Prof. Beisiegel (President of University of Göttingen) and Prof. Casper-Hehne (Vice President for International Activities of University of Göttingen) for long-term collaborations	Aug 2016
Prof. Jin Zhao	Fudan University, China	Visited NET group and gave an invited talk “HybridFlow: A Lightweight Control Plane for Hybrid SDN in Enterprise Networks”	Aug 2016
Prof. Qingjun Xiao	Southeast University, China	Visited NET group and gave an invited talk “Joint property estimation for multiple RFID tag sets using snapshots of variable lengths”	July 2016
Prof. Sanjiva Prasad	IIT Delhi, India	Visited NET group and gave an invited talk “From ABC to a LitTLe logic for mobile networks”	June 2016
Prof. Vijay Bhargava	University of British Columbia, Canada	Visited NET group and gave an invited talk “Communications Technologies for 2020 and Beyond: An Energy-Efficient Perspective with Application to Internet of Things”	May 2016
Dr. Jiachen Chen	Rutgers University, USA	Visited NET group for 2 days, gave an invited talk “MF-IoT: A MobilityFirst-Based Internet of Things Architecture with	Apr 2016

Outgoing research visits

Outgoing visitors	Institution visited	Detailed information	Date
X. Fu	Renmin University of China	Visiting School of Business, giving a talk at the Sino-German Forum on Social Computing	June 2017
X. Fu	Tsinghua University Shenzhen Graduate School, China	Visiting Prof. Qi Li and Prof. Lin Zhang, and discuss possible collaborations	June 2017
X. Fu, H. Huang	Peking University, China	Visiting the Institute of Computer Science and Data Science Institute, and giving an invited talk	June 2017
X. Fu	Northeastern University, China	Visiting School of Software and giving an invited talk	June 2017
X. Fu	Zhejiang Sci & Tech University & Alibaba Group, China	Visiting Prof. Shixiong Wang’s group, giving a talk, and visiting Alibaba group	June 2017
X. Fu	Tsinghua University	(Together with President Prof. Beisiegel, Prof. Froese) meeting Tsinghua’s Vice President of University Council Prof. Si Yuan etc.	May 2017
X. Fu	Tsinghua University, China	Visiting Profs. Jarder Luo, Yuezhi Zhou, Yong Li, Jie Tang, Juanzi Li, Zongkai Shi, Bing Yang, Yongfeng Huang	Jan, Sept, Dec 2016; Jan, June, Sept 2017
X. Fu	Fudan University	Meeting Prof. Xin Wang, Prof. Junyu Niu, Prof. Jin Zhao, Prof. Yang Chen, Prof. Y. Xu on research collaborations on MobileCloud, social networks and SDN	May 2016; Jan, June 2017
X. Fu	Jiangxi University of Finance and Economics	Visiting Prof. Zuowen Tan’s group and gave an invited talk	Mar 2017
A. Prasad	NTNU, Norway	Visiting Prof. Yuming Jiang’s group (as CleanSky secondment) and collaborating on cloud services	July-Sept 2017
A. Prasad	Bell Labs, Stuttgart, Germany	Visiting Dr. Volker Hilt’s group (as CleanSky secondment) and collaborating on cloud services	4 months in 2016
S. Kulkarni	Bell Labs, Stuttgart, Germany	Visiting Prof. K. K. Ramakrishnan’s group (as CleanSky secondment) and collaborating on SDN/NFV research	2 months in 2017
S. Kulkarni	UC Riverside, USA	Visiting Prof. K. K. Ramakrishnan’s group (as CleanSky secondment) and collaborating on SDN/NFV research	Mar-Sept 2016
X. Fu	Hainan University, China	Visiting School of Information Science and Engineering, Hainan University and given an invited talk	Dec 2016
X. Fu	Nanjing University, China	(Together with President Prof. Beisiegel, Prof. Froese, Prof. Krause, etc.) Meeting Nanjing University President Prof. Jun Chen, Vice President Prof. Jian Lv, Prof. Sanglu Lu, Prof. Wenzhong Li, etc for the inauguration of Sino-German Institute of Social Computing, and organizing Sino-German Forum on Social Computing, May 2016; Visiting SGISC Nanjing and giving invited talks (other times).	Jan, Sept 2017; May/June 2016
H. Huang	University of	Visiting Prof. Ron Burt’s group	Mar-May

	Chicago, USA		2016
H. Huang	Tsinghua University, China	Visiting Profs. Jar-Der Luo and Jie Tang's groups	Jan-Mar 2016
X. Fu	UPMC, France	Visiting LIP6 and discussing with Assoc. Prof. Stefano Secci on EU proposal preparation	Feb-Mar 2016

Conference and event participations and presentations

Participant	Conference	Detailed information	Date
F. Zhang, A. Silvestro	ACM CoNEXT 2017, Incheon, Korea	Presenting two papers at CAN workshop and attending the main conference	Dec 2017
X. Fu, D. Koll	IEEE ICNP 2017, Toronto, Canada	Attending the conference, (X. Fu) chairing a session, and (D. Koll) presenting a paper at NetBOS workshop	Oct 2017
X. Fu, M. Arumaithurai, S. Adhatarao, J. de Benedetto	ACM ICN 2017, Berlin, Germany	Attending the conference, (J. de Benetto) presenting a poster, (M. Arumaithurai) serving as local chair, (S. Adhatarao) as volunteer	Sept 2017
X. Fu, M. Arumaithurai, S. Kulkarni, A. Silvestro	ACM SIGCOMM 2017, Los Angeles, CA, USA	Attending the conference, (S. Kulkarni) presenting a paper, (A. Silvestro) presenting a paper at MECOMM workshop, (M. Arumaithurai) presenting a paper and an invited talk at MECOMM workshop; (X. Fu) attending the SIGCOMM'18 organization committee meeting	Aug 2017
X. Fu	FFC 2017, Shanghai, China	Presented an invited talk at the conference	Aug 2017
X. Fu	IEEE ICC 2017, Paris, France	Presented the social big data initiative at TCSN meeting, discussed potential collaborations	June 2017
D. Koll	IEEE ICDCS 2017, Atlanta, USA	Presented a paper at HotPOST'17 workshop	June 2017
S. Kulkarni	EuCNC 2017, Oulu, Finland	Presented a paper	June 2017
X. Fu, H. Huang	INSNA Sunbelt 2017, Beijing, China	Presented two talks at the conference	June 2017
X. Fu	HotICN 2016, Shenzhen, China	Gave a keynote speech	June 2017
A. Prasad, F. Zhang	IEEE/ACM CCGrid 2017, Madrid, Spain	Presented two papers	May 2017
X. Fu	WWW 2017, Perth, Australia	Presented a paper at BigScholar workshop, attending the conference and discussed potential collaborations	Apr 2017
J. de Benetto	NDN Community Meeting, Memphis, USA	Attended the meeting	Mar 2017
S. Kulkarni, O. Barakat	ICIN 2017, Paris, France	Presented two papers	Mar 2017
X. Fu, T. Zhao, E. Dong, S. Ding, O.	CeBIT 2017, Hannover, Germany	Attending the expo	Mar 2017

Barakat			
X. Fu and all	NetSys 2017, Göttingen, Germany	(X. Fu) co-chaired the conference, (D. Koll and M. Arumaithurai) served as local chairs, many served as volunteers	Mar 2017
X. Fu	ACM EWSN 2017, Uppsala, Sweden	Presented a poster	Feb 2017
J. De Benedetto	3rd GTS Workshop, 2017, Utrecht, Netherlands	Attended the workshop, presented ICN2020 project and discussed potential collaborations	Feb 2017
X. Fu	Workshop on Interdisciplinary Social Network Research, Darmstadt, Germany	Presented an abstract	Dec 2016
X. Fu, O. Barakat	IEEE ICNP 2016, Singapore	(O. Barakat) presenting a poster, (X. Fu) serving as workshops co-chair and a session chair for the main conference	Nov 2016
F. Zhang	IEEE MASCOTS 2016, London, UK	Presented a paper	Sept 2016
M. Arumaithurai, X. Fu	ACM ICN 2016, Kyoto, Japan	M. Arumaithurai presented a paper; X. Fu co-chaired the conference	Sept 2016
X. Fu	FFC 2016, Chengdu, China	X. Fu gave an invited talk	Aug 2016
S. Adhatarao, M. Arumaithurai	IEEE LANMAN 2016, Rome, Italy	Presenting a paper	June 2016
X. Fu, S. Wang	ACM MobiHoc 2016, Paderborn, Germany	X. Fu gave a keynote speech at the HotPOST workshop; S. Wang presented a paper at HotPOST workshop	June 2016
X. Fu	ACM CFI 2016, Nanjing, China	TPC co-chair of the conference	June 2016
X. Fu, H. Huang	Tsinghua-Chicago Conference on Online Network Behaviors, Beijing, China	Presented a paper	June 2016
L. Pu, S. Kulkarni	IEEE INFOCOM, San Francisco, USA	(L. Pu) presenting a paper and (S. Kulkarni) a poster at the conference	Apr 2016

Details on Organized Events

Nanjing-Göttingen Workshop on Social Computing, Nov 24, 2017

Xiaoming Fu (NET group) and Wenzhong Li (Nanjing University) co-organized a Nanjing-Göttingen Workshop on Social Computing on Nov 24, 2017 at the Institute of Computer Science, University of Göttingen. The 10+ attendees presented a couple of works on social computing, discussed a number of open research issues and identified common research interests and potential future collaboration in the areas of Deep Learning, Data Analytics, Sentimental Analysis as well as Mobile and Pervasive Computing.

Göttingen participants:

- Prof. Xiaoming Fu, Dr. David Koll, Zhenxuan Wang, Jacop de Benedetto, Sameer Kulkarni (NET group)
- Dr. Zhixiao Wang (Telematics group)
- Yachao Yuan (Chair of Information Management)
- Dr. Narisu Tao (E.ON), former member of NET group
- (and more)

Nanjing participants:

- Prof. Wenzhong Li
- Prof. Gangshan Wu
- Prof. Fangmin Song

Tsinghua-Göttingen Workshop on Social Big Data, November 3, 2017

Xiaoming Fu (NET group) and Jar-Der Luo (Tsinghua University) co-organized a Tsinghua-Göttingen Workshop on Social Big Data on Nov 2, 2017 at the Institute of Computer Science, University of Göttingen. The 20+ attendees presented their ongoing works on social networks and big data analytics, discussed a number of open research issues and identified common research interests and future collaboration in the areas of Big Data Analytics, Smart Cities, Social Network Analysis, Information Management, as well as Sustainable Mobility.

Göttingen participants:

- Prof. Xiaoming Fu, David Koll, Zhenxuan Wang (NET group)
- Prof. Dieter Hogrefe (TMG group, Institute of Computer Science)
- Prof. Anita Schöbel (NAM Institute)
- Prof. Marc Timme, Xiaozhu Zhang (MPI-DS)
- Prof. Lutz Kolbe, Prof. Fabian Froese, Prof. Indre Maurer and assistants (Faculty of Economic Sciences)
- (and more)

Tsinghua participants:

- Prof. Jar-Der Luo, Taoxiong Liu, School of Social Sciences
- Prof. Zongkai Shi, Vice President of University Council
- Dr. Jie Tang, Director of Tsinghua Alumni Association
- Chunyan Wu, School of Economics and Management

IEEE/ACM/GI/VDE International Conference on Networked Systems, March 13-17, 2017

In cooperation with Bell Labs Germany and TMG group, Göttingen, the NET group successfully organized the biannual international conference, which was technically co-sponsored by IEEE and ACM and German societies for distributed systems and networking research. More than 120 participants attended the 3-day single-track conference. Prof. Dr. Henning Schulzrinne (Columbia University, USA), Dr. Wieland Holfelder (Google, Germany) and Prof. Dr. Rolf Stadler (KTH Royal Institute of Technology, Sweden) gave keynote speeches. The conference also had speakers from DAAD, Humboldt Foundation, DFG, EU etc, in addition to peer-reviewed papers, demos and posters. In addition, two workshops were held on the day before the main conference. The GI/VDE KuVS community had also its community meeting and also executive committee meeting.

Sino-German Symposium on Social Computing, Aug 28-Sept 2, 2016

Co-sponsored by DFG-NSFC Sino-German Center for Research Promotion.

Organization Committee:

- Profs. Xiaoming Fu, Margarete Boos, Lutz Kolbe (Göttingen)
- Profs. Jar-Der Luo, Jie Tang (Tsinghua)
- Profs. Wenzhong Li, Chuanming Chen (Nanjing)

Local organizers: Hong Huang, Federica Poltronieri.

International participants (keynote speakers):

- Prof. Peter Gloor (MIT),
- Prof. John Mohr (UCSB),
- Prof. Sophie Mützel (U Lutzern),

German side participants:

- Prof. Xiaoming Fu, Dr. Mayutan Arumathurai, Dr. David Koll, Dr. Hong Huang, etc. (NET group, University of Göttingen)
- Profs. Marcus Baum, Margarete Boos, Lutz Kolbe, Fabian Froese, Indre Maurer, Tim Friede, Jens Grabowski, Dieter Hogrefe (Univ Göttingen)
- Prof. Jürgen Kädtler, Dr. Gerd Paul (SOFI, Uni Göttingen)
- Dr. Marco Schmitt (RWTH Aachen),
- Prof. Marc Timme, Xiaozhu Zhang (MPI-DS),
- Dr. Krishna Gummadi (MPI-SWS),
- Profs. Christian Stegbauer, Alexander Mehler (U. Frankfurt),
- PD Dr. Jan Fuhse (HU Berlin),
- Prof. Wolfgang Nejdl (U. Hannover),
- Prof. Dietmar Möller (TU Clausthal),
- Andreas Janson (U. Kassel),
- (and more)

Chinese side participants:

- Profs. Jar-Der Luo, Lu Zheng, Yong Li, Yajuan Zhang (Tsinghua),
- Prof. Dongyan Zhao (Peking U.)
- Prof. Jiwen Song (Renmin U. China)
- Prof. Ying Fan (Beijing Normal U.)
- Prof. Xijin Tang (AMSS-CAS)
- Prof. Jianxun Chu (USTC)
- Prof. Yang Chen (Fudan)
- Profs. Wenzhong Li, Zhiwei Wu, Haijian Liu, Xueqin Min (Nanjing U)
- Profs. Bo Liu, Jiuxin Cao (Southeast U)
- Prof. Xiaohui Yu (Shandong U)
- Profs. Jiuxin Cao, Bo Liu (Southeast U)
- Prof. Shixiong Wang (Zhejiang Sci&Tech University)
- (and more)

Project meetings*

Participant	Host institution/location	Detailed information	Date
M. Arumaithurai, J. de Benedetto	UCL, London, UK	EU-Japan H2020 ICN2020 EU consortium meeting	Nov 30- Dec 1, 2017
M. Arumaithurai	Osaka University, Japan	EU-Japan H2020 ICN2020 first annual review, and consortium plenary meeting	Oct 3-6, 2017
D. Koll, X. Fu, S. Kulkarni, A. Prasad, A. Silvestro	Tsinghua University, Beijing, China	EU FP7 CleanSky project 3 rd summer school	Sept 4-8, 2017
M. Arumaithurai, X. Fu, S. Adhatarao	NET Group, Göttingen	EU-Japan H2020 ICN2020 Project Kickoff Meeting	Sept 5-6, 2016
D. Koll, M. Arumaithurai, X. Fu, S. Kulkarni, A. Prasad, A. Silvestro	NET Group, Göttingen	EU FP7 CleanSky project workshop and consortium meeting	Mar 13, 2017
X. Fu, D. Koll	Uni Göttingen	Organized the NetSys 2017 TPC meeting and KuVS executive committee meeting	Nov 2016
X. Fu	Uni Göttingen	DFG Excellence Cluster LUSci proposal meetings	Oct 2016 - present
D. Koll, S. Kulkarni, A. Prasad, A. Silvestro	NTNU, Norway	EU FP7 CleanSky project 2 nd Conference	Aug 4-5, 2016
X. Fu	Shandong University, China	Visiting Prof. Xiaohui Yu, Dr. Xu Wang etc (together with Prof. Christoph Menzel of Ostfalia University of Applied Science) and discussed possible BMBF-MOST etc collaborations	Aug 2016
X. Fu	Wolfsburg AG & IFI/Wi-Inf Göttingen	BMBF Multi-modal Transport for Smart Cities proposal consortium meetings	Aug 2016 – July 2017
X. Fu	L3S, Hannover; IFI Göttingen; TU Braunschweig	BMBF Deutsches-Internet-Institut (DII) proposal consortium meetings	June 2016 - Feb 2017
X. Fu	Tsinghua University, Beijing / University of Göttingen	DFG-MoE IRTG social big data (draft) proposal consortium meetings	Feb 2016 - present
D. Koll, M. Arumaithurai, X. Fu, S. Kulkarni, A. Prasad, A.	University of Helsinki, Finland	EU FP7 CleanSky 2 nd Summer School and mid-term review meeting: http://cleanskysummer.cs.helsinki.fi/	May 30- June 3, 2016

Silvestro			
M. Arumaithurai, X. Fu	Waseda University, Tokyo, Japan	EU-JP FP7 GreenICN project final review meeting	May 28- 29, 2016
D. Koll, S. Kulkarni, A. Prasad, A. Silvestro	NEC Europe, Heidelberg, Germany	EU FP7 CleanSky project 1st Conference	Feb 29- Mar 1, 2016

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

News Press Releases

Source	Detailed information	Date/Edition
Nouvelles d'Europe	Big Data Assisted Decision Making in the future (in Chinese)	June 2017
Univ Göttingen press news	Internationale Informatik-Konferenz in Göttingen	Mar 2017
Göttingen International Newsletter	Agreement on cooperation in the area "Social Networks and Big Data" with Tsinghua University, Beijing	Feb 2017
Göttingen International Newsletter	Sino-German Symposium on Social Computing in Göttingen	Oct 2016
Univ Göttingen press news	Ausgezeichnetes Informatik-Projekt	June 2016
Univ Göttingen press news	Soziale Netzwerke und Big Data	June 2016
Science & Technology Daily news	It's the Right Time for Deepening International Cooperations – an Interview with Prof. Beisiegel, President of University of Göttingen (in Chinese)	June 2016
Science & Technology Daily news	The Inauguration of Sino-German Institutes of Social Computing (in Chinese)	May 2016
Nanjing University press news	The Inauguration of Sino-German Institutes of Social Computing (in Chinese)	May 2016

Awards

- Humboldt Fellowship (Xu Chen)
- IET Fellow, class 2017 (Xiaoming Fu)
- IEEE HotPOST 2017 Best Paper Award (David Koll, Martin Schwarzmaier, Xiaoming Fu)
- IEEE COMSNET 2018 Student Traveling Grant (Sripriya Adhatarao)
- ACM SIGCOMM 2017 Student Traveling Grant (Sameer Kulkarni)
- EuCNC 2017 Student Traveling Grant (Sameer Kulkarni)
- ICIN 2017 Student Traveling Grant (Osamah Barakat)

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
- Director, [Sino-German Institute of Social Computing](#), 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
- Examination board Master’s program of “Economic Sciences”, University of Göttingen
- Coordinator of Planet-Lab membership for University of Göttingen

Elected and Appointed Positions

- Senior Visiting Scholar, Department of Sociology, Tsinghua University, China
- Visiting Scholar, LIP6, UMPC, Paris, France
- Changjiang Scholar Visiting Professorship, Ministry of Education, China
- “111” Guest Professor, Nanjing University, China
- Adjunct Professor, Northeastern University, China
- Vice Director, Center for Social Network Research, Tsinghua University, Beijing, China
- Advisory board, Shanghai Computer Science Society Internet Technical Committee, China
- Chair, IEEE Communications Society Internet Technical Committee’s Special Interest Group (SIG) on Information Centric Networking (Mayutan Arumathurai)
- Grant Evaluator: DFG, NSFC China, Hong Hong RGC, EU H2020, etc.

Conference organization

- Steering Committee Member, ACM SIGMOBILE HotPlanet Workshop
- Steering Committee Chair, ACM SIGMOBILE International Workshop on Mobility in the Evolving Internet Architecture (MobiArch)
- TPC Co-Chair, IEEE/ACM/GI/ITG NetSys 2017
- TPC Co-Chair, ACM CFI 2016
- General Co-Chair, ACM ICN 2016
- Publicity Co-Chair, ACM ICN 2016 (Mayutan Arumathurai)
- Local Co-Chair, ACM ICN 2017 (Mayutan Arumathurai)
- Local Chairs, IEEE/ACM/GI/ITG NetSys 2017 (David Koll, Mayutan Arumathurai)
- Publicity Co-Chair, ACM SOSR 2018 (Mayutan Arumathurai)
- Publicity Co-Chair, ACM SIGCOMM 2017 (Mayutan Arumathurai)

- Workshops Co-Chair, ACM SIGCOMM 2018
- Workshops Co-Chair, IEEE ICNP 2016

Technical Program Committees

- TPC Member, ACM ICN 2016-17 (Mayutan Arumathurai)
- TPC Member, IEEE ICNP 2016-17
- TPC Member, IFIP Networking 2017
- TPC Member, IEEE INFOCOM 2017-NetSciCom
- TPC Member, IEEE ICCCN 2017-Track on Communication Architecture, Algorithms, Modeling and Evaluation
- TPC Member, Network of Future (NoF) 2017
- TPC Member, 2nd International Workshop on Social Influence Analysis (SocInf 2016)
- TPC Member, IEEE ICC 2016-SAC Social Networks
- TPC Member, IEEE IWQoS 2016
- TPC Member, First IFIP Internet of People Workshop (IoP-W 2016)
- TPC Member, Elsevier Computer Communications (COMCOM) Journal (Mayutan Arumathurai)

Journal Editorship

- Technical Editor, IEEE Communications Magazine
- Associate Editor, IEEE Transactions on Network and Service Management
- Area Editor, Elsevier Computer Communications Journal
- Associate Editor, Springer Networking Science Journal
- Associate Editor, Chinese Journal of Electronics
- Associate Editor, EURASIP Journal on Wireless Communications and Networking (Xu Chen)
- Guest Co-Editor, IEEE Communications Magazine, Feature Topic on ICN Security
- Guest Co-Editor, WWW Journal Special Issue on Social Computing and Big Data Analytics
- Guest Co-Editor, International Journal of Communication Systems, Special Issue on Mobile Internet: Content, Security and Terminal
- Guest Co-Editor, Computer Communications, Special Issue on Online Social Networks

Previous (Bi)Annual Reports of NET Group

Annual Reports [2015](#), [2014](#), [2013](#), [2012](#), [2011](#), [2010](#), [2009](#), [2007-2008](#)

Enjoy reading and look forward to seeing you in 2018!