

## Xiaoming Fu, Full Professor, PhD.

[Computer Networks Group](#), [Institute of Computer Science](#), [Georg-August-University of Göttingen](#)

Goldschmidtstr. 7, 37077 Göttingen, Germany

Tel/Fax: +49-551-39 172023/14416, Email: [fu@cs.uni-goettingen.de](mailto:fu@cs.uni-goettingen.de)

<http://user.informatik.uni-goettingen.de/~fu/>

### Education, Employment and Work Experience

Since 2015	Director, Sino-German Institute of Social Computing, University of Göttingen, Germany
Since 2013	Vice Director, Center for Social Network Research, Tsinghua University, China
Since 2012	International Officer – Computer Science, Faculty of Mathematics and Computer Science, University of Göttingen
2010-2012	Dean for Academic Affairs – Computer Science, Faculty of Mathematics and Computer Science, University of Göttingen
Since 2007	University Professor and Head of Computer Networks Group, University of Göttingen
Since 2005	Visiting Professor/Scholar at Tsinghua U. (2010- ), Nanjing U. (2010- ), Fudan U. (2011- ), Northeastern U. (2017- ), Hong Kong PolyU (2015), China; Columbia U. (2008, 2009), UCLA (2009), USA; Cambridge (2005, 2007), UK; Uppsala (2014, 2015), Sweden; Sorbonne U./LIP6 (2014, 2016), France; Victoria U. (2018), Australia
2003-2005	Specialist Task Force Expert (STF 256 & STF 276), <a href="#">European Telecommunications Standards Institute</a> , Sophia Antipolis, France
2007	Habilitation in Computer Science, University of Göttingen
2002-2007	Assistant Professor, Institute of Computer Science, University of Göttingen
2000-2002	Member of Scientific Staff, <a href="#">Telecommunications Networks Group</a> , <a href="#">TU Berlin</a> , Germany
2000	PhD in Computer Science, <a href="#">Tsinghua University</a> , Beijing, China
1997-2000	Research Assistant, Department of Computer Science, Tsinghua University, China
1997	Master's degree in Computer Science (with honors), <a href="#">Northeastern University</a> , China
1994	Bachelor's degree in Electrical Engineering, Northeastern University, China

### Awards and Honors

2017	Fellow of Institution of Engineering and Technology (IET)
2014-2015	IEEE Distinguished Lecturer (Communications Society)
2017	Best Paper Award, IEEE/ACM 9 <sup>th</sup> Workshop on Hot Topics in Planet-Scale Mobile Computing and Online Social Networking (HotPOST 2017)
2014	Best Paper Award, ACM 1 <sup>st</sup> Conference on Information-Centric Networking (ICN 2014)
2013	Best Paper Award, IEEE International Workshop on Local & Metropolitan Area Networks (LANMAN 2013)
2014	“Plan 111” Professor, Nanjing University, China (Awarded by the State Administration of Foreign Experts Affairs & the Ministry of Education, PR China)
2009	Changjiang Scholar Visiting Professor, Tsinghua University, China (Awarded by the Ministry of Education, PR China)
2009	Fulbright Scholar Visiting Professor, UCLA, USA (Awarded by the US Department of State)
2009	IEEE Senior Member
2005	University of Göttingen Foundation Council's Prize for Exceptional Publications by Young Scientists

### Professional Activities

Leaderships in Scientific Communities	<u>Chair</u> (2011-2013) and <u>Awards Committee Chair</u> (2014-2017) of <a href="#">Internet Technical Committee (ITC)</a> , IEEE Communications Society (ComSoc) and the Internet Society (ISOC) <u>Vice Chair</u> (2010-2012), <u>Secretary</u> (2008-2010) of IEEE ComSoc <a href="#">TCCC</a> <u>Coordinator &amp; Steering Committee Chair</u> : EU FP7 <a href="#">GreenICN</a> , <a href="#">MobileCloud</a> , <a href="#">CleanSky</a> and H2020 <a href="#">ICN2020</a> projects <u>Workpackage Leader &amp; Steering Committee Member</u> : EU FP6 ENABLE, MING-T and VIDIOS projects
---------------------------------------	--

International Research Grant Committees	EU FP7 (2012) and Horizon 2020 (2014), DFG (2015- ), National Natural Science Foundation of China (2014- ), Research Foundation – Flanders, Belgium (2012), Swedish Foundation for Strategic Research (2009, 2011), Research Grants Council of Hong Kong (2010- ), Cyprus Research Promotion Foundation (2017)
Scientific Editorial Board	<u>Technical Editor</u> , IEEE Communications Magazine (2013- ); <u>Associate Editor</u> , IEEE Transactions on Network and Service Management (2011- ); <u>Editorial Board Member</u> , Chinese Journal of Electronics (2016- ), IEEE Networking Letters (2018- ) <u>Area Editor</u> , Elsevier Computer Networks (2012-2015), Computer Communications (2008- ); <u>Guest Editor</u> of IEEE Communications Magazine (Feature Topic on Information-Centric Networking Security, July 2018; Feature Topic on Mobile Cloud Computing, Mar. 2015), IEEE Network (Special Issue on Implications and Control of Middleboxes in the Internet, Sept/Oct. 2008), Elsevier Computer Networks (Special Issue on Measurement-based Optimization of P2P Networking and Applications, Feb. 2012), Computer Communications (Special Issue on Online Social Networks, Jan. 2016), Springer World Wide Web Journal (Special Issue on Big Data Analytics and Social Computing, Aug. 2018).
Conference Organization & Tech. Program Committees	<u>General (Co-)Chair</u> of ACM ICN'16, IEEE ICNP'13, IEEE P2PNet'10; <u>TPC (Co-)Chair</u> for ERC Networking@SIGCOMM'18, IEEE HotICN'18, IEEE/ACM/VDE/GI NetSys'17, ACM CFI'16, IEEE CloudNet'13, ACM HotSocial@KDD'12, IEEE ICC'12-AIC, ICCN'10-ISAP, GLOBECOM'09-NGNI, MobiArch'06-'07@SIGCOMM, MobiArch'12@MobiCom, HotPlanet'09@MobiSys, NVWS'09@ KiVS, DFG-JSPS Workshop on Future Networks and Mobile Sensing'15, DFG-NSFC Symposium on Social Computing'16, DFG-NSFC Workshop on IoT'10...; <u>TPC Member/Session Chair</u> for a number of conferences, incl. ACM CoNEXT, COSN, ANCS, IEEE INFOCOM, ICNP, ICDCS, IWQoS, CloudCom, CCW, SIAM SDM, IFIP Networking, etc.; <u>Workshops Co-Chair</u> : ACM SIGCOMM'18, MobiCom'10&MobiHoc'10, IEEE ICNP'16; <u>Publicity Co-Chair</u> : IEEE ICNP'09, ICNP'11, IWQoS'10; <u>Steering Committee Member/Chair</u> of international conferences: ACM COSN, MobiArch, HotPlanet, IEEE INFOCOM Global Internet Symposium, INFOCOM NOM, CCW.
Keynote/Tutorials/Panelist	<u>Keynote</u> at HotICN'17, ACM HotPOST@MobiHoc'16, IEEE Global Internet Symp.'15, Social Computing Workshop'15, IFIP Networking'12, Conf. on social nets & social capitals'12; <u>Panelist/panel chair</u> at LANMAN'15, ICNP'14 & PhD Forum, KDD'12-HotSocial, MobiCom'09-MobiArch, MobiCom'09-MICNET, KiVS'09; <u>Tutorials</u> at Networking'06, ICCCN'10, Frontiers of Journalism & Communication Summer School'12 at Renmin University of China.
PhD Supervision and External Review	Successfully supervised 20 PhDs (and 11 are ongoing), 7 of which became faculty member. External PhD thesis review: UPMC/Sorbonne U (2016, 2018), U Oslo (2010, 2017), Waterford Inst. of Technology (2016), Telecom SudParis & UPMC (2015), Aalto U (2014, 2015), U Liège (2012), VU Brussels (2011), U Helsinki (2010), Dublin City U (2010), Tsinghua U (2010)

## University Services

Since 2015	Founding Director, Sino-German Institute of Social Computing, University of Göttingen, Germany
Since 2012	International Officer – Computer Science, Faculty of Mathematics and Computer Science, University of Göttingen
2010-2012	Dean for Academic Affairs – Computer Science, Faculty of Mathematics and Computer Science, University of Göttingen
Since 2011	Steering Committee of new study program 'Master/PhD in Internet Technology and Information Systems (ITIS)', Universities of Göttingen, Hannover, Braunschweig & Clausthal
2010	Faculty Search Committee, Junior Professorship "Computer Security", University of Göttingen
Since 2009	Board Member of Institute of Computer Science, Faculty of Mathematics and Computer Science, University of Göttingen <i>Established and coordinating cooperation and exchange agreements with several universities in USA (Columbia U., UCLA), France (UPMC), Italy (U. Roma2), and China (Tsinghua U., Peking U., Nanjing U., Fudan U., and Northeastern U.)</i>
2014 – 2016	Hosting a Humboldt Postdoc Fellow (Dr. Xu Chen, now Full Professor of data science and vice director of State Joint Engineering Lab of Digital Home Interactions at Sun Yat-sen U., China)
2011 – 2013	Hosting a Humboldt Postdoc Fellow (Dr. Wenzhong Li, now Assoc. Prof. at Nanjing U., China)
Since 2005	Thesis Committee Member of "PhD in Computer Science" program, University of Göttingen

## Ongoing and Supervised Doctoral Students

Candidates and thesis titles	Start	End	Further career of the candidate
Zhang, Jiaquan	2017	Ongoing	
Ding, Shichang	2016	Ongoing	
de Benedetto, Jacopo	2016	Ongoing	
Malik, Ahsan (extern, Huawei Research Europe)	2016	Ongoing	
Silvestro, Alessio (extern, NEC Labs Heidelberg)	2016	Ongoing	
Prasad, Abhinandan	2015	Ongoing	
Kulkarni, Sameer	2015	Ongoing	
Adhatarao, Sripriya Srikant	2015	Ongoing	
Barakat, Osamah Lutf	2015	Ongoing	
Zhao, Tao	2015	Ongoing	
Zhao, Bo (co-supervise with Ramin Yayahpour)	2014	Ongoing	
Tschofenig, Hannes (extern, ARM UK): IP-based Emergency Services	2009	Ongoing	Senior Research Scientist at ARM Ltd. Also: Member of Internet Architecture Board (IAB) (2010-2014)
Zhang, Fei (co-supervise with Ramin Yayahpour): Challenges and New Solutions for Live Migration of Virtual Machines in Cloud Computing Environments	2014	2018	
Stango, Antonietta (co-supervised with Dario Farina, University Medical Center Göttingen/ Imperial College London): Increasing the Robustness of Active Upper Limb Protheses	2013	2016	Researcher at Institute of Neuro-rehabilitation Systems, University Medical Center Göttingen
Huang, Hong: Triadic Closure and Its Influence in Social Networks. A Microscopic View of Network Structural Dynamics ('summa cum laude')	2012	2016	Assistant Professor of Computer Science, Huazhong University of Science and Technology, China; Adjunct researcher at Computer Networks Group, University of Göttingen
Xu, Ren (co-supervised with Dario Farina, University Medical Center Göttingen/Imperial College London): Short-Latency Brain-Computer Interface Using Movement-Related Cortical Potentials	2012	2016	Research Scientist at Guger Technologies, Austria
Pu, Lingjun (co-supervised with Jingdong Xu, Nankai University): On Service Design and Key Issues in 5G Edge Network Architecture	2011	2016	Assistant Professor of Computer Science, Nankai University, China
Tao, Narisu: Data Driven Network Analysis and Applications	2011	2015	Data Scientist at E.ON, Munich
Zhang, Yuan: Dynamic Resource Scheduling in Cloud Data Centers	2011	2015	Assistant Professor at Chinese University of Communications (CUC), Beijing, China
Koll, David: Towards a Robust and Secure Decentralized Online Social Network ('summa cum laude')	2011	2014	Junior Research Group leader at NET Group, University of Göttingen
Chen, Jiachen: A Content-Oriented Architecture for Publish/Subscribe Systems ('summa cum laude')	2010	2015	Research Associate at WinLab, Rutgers University, USA
Jiao, Lei: Online Social Network Data Placement over Clouds	2010	2014	Assistant Professor of Computer Science at University of Oregon, USA
Zhu, Konglin: Social-based Data Routing Strategies in Delay	2010	2014	Associate Professor at Beijing University of Posts and Telecommunications

Tolerant Networks			(BUPT), China
Hameed, Sufian: Leveraging Email based Social Networks to Prevent Spam - Framework, System Design and Evaluation	2009	2012	Assistant Professor at <a href="#">FAST-NUCES</a> , Pakistan
Tegeler, Florian: Content Agnostic Malware Detection in Networks ('summa cum laude')	2008	2012	R&D Manager at Mahr GmbH, Germany
Neumann, Niklas: Decentralized Network Based Mobility Management: Framework, System Design and Evaluation	2007	2011	Consultant
Stiemerling, Martin: Cooperative Internet Access in Resource Constrained Environments	2007	2011	Professor at University of Applied Sciences Darmstadt, Germany. Also: IESG Member and IETF Transport Area Director (2012-2016)
Arumathurai, Mayutan: Network Friendly Congestion Control: Framework, Protocol Design and Evaluation	2007	2010	Junior Research Group leader at NET Group, University of Göttingen
Shi, Lei: On the Network Monitoring and Fault Management of Next Generation Networks	2007	2010	Lecturer (Assistant Professor) at Institute of Technology Carlow, Ireland
Steinleitner, Niklas: Firewall Traversal in Mobile IPv6 Networks	2006	2008	Consultant
Kuo, Fang-Chun: Exploiting Network Coding in Lossy Wireless Networks	2005	2009	Research Innovation Manager at Traveling, Berlin, Germany
Lei, Jun: Media Distribution Using Overlay Multicast and Peer-to-Peer Technologies ('summa cum laude')	2004	2008	Research Scientist at Nokia Solutions Networks

## Research Grants

Project title and funding sources	Start	End
Detection and Prevention of Data Exfiltration by Insiders in Big Data Environments, funded by Universities Australia - German DAAD Joint Research Cooperation Scheme (PI), €11K	2018	2019
ICN2020 – Advancing ICN towards real-world deployment through research, innovative applications, and global scale experimentation, funded by EU H2020 ICT EU-Japan (coordinator), €1.3M (EU)+€1.3M (JP) / €510K (UGOE)	2016	2019
SocialBD – Social Networks in Big Data, funded by Lindemann Foundation, Germany, €10K	2016	2017
DFG-NSFC Symposium on Social Computing, funded by DFG-NSFC Sino-German Center, €45K	2016	2016
DFG-JSPS Symposium on Future Network and Pervasive Computing, funded by DFG, €15K	2015	2015
Socially-Motivated Cooperative Device-to-Device Communications, funded by Alexander von Humboldt Foundation	2014	2016
CleanSky – Network for Cloud Computing Eco-System, funded by EU FP7 MC-ITN (coordinator), €3.24M (EU) / €810K (UGOE)	2014	2018
MobileCloud – Linking Sino-European Research Institutions in the Mobile Cloud Computing Era, funded by EU FP7 MC-IRSES (coordinator), €481K (EU) / €300K (UGOE)	2014	2016
GreenICN – Architecture and Applications of Green Information Centric Networking, funded by EU FP7 ICT EU-Japan (coordinator), €1.5M (EU)+€1.5M (JP) / €430K (UGOE)	2013	2016
SWZ – Simulation Research Center, funded by State Lower Saxony & Volkswagen Foundation, €50K	2013	2016
Conference: International Conference on Network Protocols (ICNP 2013), funded by DFG, €25K	2013	2013
Collaborative Data Dissemination in Delay Tolerant Mobile Ad Hoc Networks, funded by Alexander von Humboldt Foundation	2012	2014
SocialNets – Structure, Functionality and Dynamics of Social Networks, funded by Lindemann Foundation, Germany, €10K	2012	2013
Principles and Design of Next-Generation Internet Media Streaming (w/ Fudan University), funded by DAAD/CSC PPP-China, €27K	2011	2013
DFG-NSFC Symposium on Internet of Things, funded by DFG-NSFC Sino-German Center, €34K	2010	2010
Future Internet Mobility and Routing, funded by Fulbright Foundation/US Department of State	2009	2009
New Advances and Applications of Next Generation Internet Signaling (w/ Columbia University), funded by DAAD PPP-USA, €16K	2008	2009

ADVMM – Advanced Mobility Management in 4G Networks, funded by Huawei Research, €80K	2007	2008
MING-T – Multistandard integrated network convergence for global mobile and broadcast technologies, funded by EU FP6 IST STREP, €1.7M (EU) / €201K (UGOE)	2007	2009
ENABLE – Enabling Efficient and Operational Mobility in Large Heterogeneous IP Networks, funded by EU FP6 IST STREP, €2.45M (EU) / €420K (UGOE)	2006	2008
Daidalos-II – Designing Advanced network Interfaces for the Delivery and Administration of Location independent, Optimised personal Services, funded by EU FP6 IST Integrated Project, Co-PI, €13.8M / €200K (UGOE)	2006	2008
PTLS - Performance Study of Transport Layer Security, funded by Siemens Research, €20K	2005	2006
VIDIOS – Video Distribution over MPLS Networks supporting heterogeneous format environments, funded by EU FP6 Eureka Celtic and Deutsche Telecom (PI), €3.7M / €274K (UGOE)	2005	2006
MobiAuth – QoS and Authentication Issues in IP Mobility, Panasonic Princeton Lab, USA (PI), \$15K	2003	2004

### Teaching (<https://wiki.net.informatik.uni-goettingen.de/wiki/Teaching>)

- Summer Semester 2018: Advanced Practical Course Data Science (MSc), Practical Course Networking Lab (BSc), Advanced Computer Networks (MSc)
- Winter Semester 2017/18: Computer Networks (BSc), Practical Course: Data Science (MSc/PhD/BSc), Practical Course Networking Lab (BSc), Seminar on Internet Technologies (BSc/MSc)
- Summer Semester 2017: Advanced Practical Course Data Science (MSc/BSc), Seminar on Internet Technologies (Summer 2017) (MSc), Advanced Computer Networks (MSc), Practical Course Networking Lab (BSc)
- Winter Semester 2016/17: Practical Course Networking Lab (BSc), Computer Networks (BSc), Practical Course on Data Science for Computer Networks (MSc), Seminar on Internet Technologies (BSc/MSc)
- Summer Semester 2016: Practical Course Networking Lab (BSc), Practical Course Advanced Networking: Data Science Edition (MSc), Advanced Topics in Social Network in Mobile Big Data (MSc), Seminar on Internet Technologies (BSc/MSc), Advanced Computer Networks (MSc)
- Winter Semester 2015/16: Practical Course Networking Lab (BSc), Practical Course Advanced Networking (MSc), Advanced Topics in Mobile Communications (AToMIC) (MSc), Seminar on Internet Technologies (BSc/MSc), Advanced Computer Networks (MSc), Machine Learning and Pervasive Computing (MSc)
- Summer Semester 2015: Practical Course Networking Lab (BSc), Practical Course Advanced Networking (MSc), Advanced Topics in Mobile Communications (AToMIC) (MSc), Seminar on Internet Technologies (BSc/MSc), Advanced Computer Networks (MSc), Machine Learning and Pervasive Computing (MSc)
- Winter Semester 2014/15: Advanced Topics in Computer Networking (MSc), Practical Course Networking Lab (BSc), Practical Course Advanced Networking (MSc), Seminar on Internet Technologies (BSc/MSc), Computer Networks (BSc), Machine Learning and Pervasive Computing (MSc)
- Summer Semester 2014: Advanced Topics in Social Network and Big Data Methods (MSc), Advances in Mobile Applications and Mobile Cloud Computing (MSc), Practical Course Networking Lab (BSc), Practical Course Advanced Networking (MSc), Seminar on Internet Technologies (BSc/MSc), Advanced Computer Networks (MSc)
- Winter Semester 2013/14: Advanced Topics in Computer Networking (MSc), Practical Course Networking Lab (BSc), Practical Course Advanced Networking (MSc), Seminar on Internet Technologies (BSc/MSc), Computer Networks (BSc), Selected Topics in Pervasive Computing (MSc)
- Summer Semester 2013: Advanced Topics in Mobile Communications (AToMIC) (MSc), Practical Course Networking Lab (BSc), Practical Course Advanced Networking (MSc), Seminar on Internet Technologies (BSc/MSc), Computer Networks (BSc), Advanced Computer Networks (MSc)
- Winter Semester 2012/13: Advanced Topics in Computer Networking (MSc), Practical Course Networking Lab (BSc), Practical Course Advanced Networking (MSc), Seminar on Internet Technologies (BSc/MSc), Computer Networks (BSc), Social Networks Seminar (MSc)
- Summer Semester 2012: Advanced Topics in Mobile Communications (AToMIC) (MSc), Practical Course Networking Lab (BSc), Practical Course Advanced Networking (MSc), Seminar on Internet Technologies (BSc/MSc), Computer Networks (BSc), Advanced Computer Networks (MSc)
- Winter Semester 2011/12: Advanced Topics in Computer Networking (MSc), Practical Course Networking Lab (BSc), Practical Course Advanced Networking (MSc), Seminar on Internet Technologies (BSc/MSc), Computer Networks (BSc), Social Networks Colloquium (BSc/MSc)
- Summer semester 2011: Advanced Topics in Mobile Communications (AToMIC) (MSc), Practical Course Networking Lab (BSc), Practical Course Advanced Networking (MSc), Seminar on Internet Technologies (BSc/MSc), Computer Networks (BSc)
- Winter Semester 2010/11: Advanced Topics in Computer Networking (MSc), Practical Course Networking Lab (BSc), Practical Course Advanced Networking (MSc), Seminar on Internet Technologies (BSc/MSc), Computer Networks (previously Telematik) (BSc), Seminar on Mathematical Models (MSc/PhD)



- Summer semester 2010: Seminar Advanced Topics in Mobile Communications, Seminar Internet Technologies; Practical Course Networking Lab.
- Winter semester 2009/10: seminars [Internet Technologies](#) and [Advanced Topics in Computer Networking, Practical Course Networking Lab](#), and lecture [Telematik \(Computer Networks\)](#).
- Summer semester 2009: Seminar Advanced Topics in Mobile Communications, Seminar on Internet Technologies; Practical Course Networking Lab.
- Winter semester 2009/10: seminars [Internet Technologies](#) and [Advanced Topics in Computer Networking, Practical Course Networking Lab](#), and lecture [Telematik \(Computer Networks\)](#).
- Summer semester 2009: Seminar Advanced Topics in Mobile Communications, Seminar on Internet Technologies; Practical Course Networking Lab (*based on Prof. Jorg Liebeherr and Prof. Magda El Zarki's book "Mastering Networks: An Internet Lab Manual*).
- Winter semester 2008/09: [Praktikum-Advanced Networking](#), seminars [Internet Technologies](#), [Advanced Topics in Computer Networking](#), and lectures [Telematik \(Computer Networks\)](#).
- Summer semester 2008: [Praktikum-Telematik](#), seminars [Internet Technologies - Selected Topics on Multimedia and Peer-to-Peer Networking](#), [Advanced Topics in Mobile Communications](#), and lecture "[Mobile Communications II](#)".
- Winter semester 2007/08: practical course "[Practical Course on Computer Networks](#)", lecture [Telematik \(Computer Networks\)](#) and seminar [Advanced Topics in Computer Networking](#).
- Summer semester 2007: practical course "[Practical Course on Computer Networks](#)", seminars [Advanced Topics in Computer Networking](#) and [Digital Video Broadcasting \(DVB\)](#).
- Winter semester 2006/07: practical course "[Praktikum-Telematik](#)", lecture [Telematik \(Computer Networks\)](#) and seminar [Advanced Topics in Mobile Communications](#).
- Summer semester 2006: Seminar [Advanced Topics in Internet Research](#) and practical course "[Praktikum-Telematik](#)".
- Winter semester 2005/06: Seminar [Advanced Topics in Mobile Communications](#), Lecture [Telematik \(Computer Networks\)](#), practical course "[Praktikum-Telematik](#)".
- Summer semester 2005: Seminar [Advanced Topics in Computer Networking](#) and practical course "[Praktikum-Telematik](#)".
- Winter semester 2004/05: Lecture [Telematik \(Computer Networks\)](#) and practical course "[Praktikum-Telematik](#)".
- Summer semester 2004: Seminar [Advanced Topics in Mobile Communications](#).
- Winter semester 2003/2004: Lecture [Telematik \(Computer Networks\)](#).
- Summer semester 2003: Lecture [Informatik II \(Computer Science-II\)](#).
- Winter semester 2002/2003: Lecture [Telematik \(Computer Networks\)](#).

#### Journal Publications (Selected)

1. Xu Chen, Wenzhong Li, Sanglu Lu, Zhi Zhou, [Xiaoming Fu](#), Efficient Resource Allocation for On-Demand Mobile-Edge Cloud Computing, **IEEE Transactions on Vehicular Technology**, DOI: 10.1109/TVT.2018.2846232, in press.
2. 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**, DOI: 10.1109/TETC.2016.2581704, in press.
3. 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**, 12(3), Article No. 30, Jan. 2018.
4. 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.
5. 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.
6. 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.
7. 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 & Networking, 34(12): 3887-3901, Nov. 2016
8. 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
9. 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.
10. Hong Huang, Jie Tang, Lu Liu, JarDer Luo, [Xiaoming Fu](#), Triadic Closure Pattern Analysis and Prediction in Social Networks, **IEEE Transactions on Knowledge and Data Engineering**, 27(12): 3374-3389, Dec 2015.

11. Wei Du, Yongjun Liao, Narisu Tao, Pierre Geurts, [Xiaoming Fu](#), Guy Leduc, Rating Network Paths for Locality-Aware Overlay Construction and Routing, **IEEE/ACM Transactions on Networking**, 23(5): 1661-1673, Oct 2015.
12. Wenzhong Li, Yuefei Hu, [Xiaoming Fu](#), Sanglu Lu, Daoxu Chen, Cooperative Positioning and Tracking in Disruption Tolerant Networks, **IEEE Transactions on Parallel and Distributed Systems**, 26(2): 382-391, Feb 2015.
13. Qi Li, Xinwen Zhang, Qingji Zheng, Ravi Sandhu, [Xiaoming Fu](#), LIVE: Lightweight Integrity Verification and Content Access Control for Named Data Networking, **IEEE Transactions on Information Forensics and Security**, 10(2): 308-320, Feb 2015.
14. Konglin Zhu, Wenzhong Li, [Xiaoming Fu](#), SMART: A Social and Mobile Aware Routing Strategy for Disruption Tolerant Networks, **IEEE Transactions on Vehicular Technology**, 63(7): 3423-3434, Sept. 2014.
15. Hao Liu, Yaoxue Zhang, Yuezhi Zhou, [Xiaoming Fu](#), Laurence Yang, Receiving Buffer Adaptation for High-speed Data Transfer, **IEEE Transactions on Computers**, 62(11): 2278-2291, Nov. 2013.
16. Dan Li, Hongze Zhao, Mingwei Xu, [Xiaoming Fu](#), Revisiting the Design of Mega Data Centers: Considering Heterogeneity among Containers, **IEEE/ACM Transactions on Networking**, 22(3): 1503-1515, Oct. 2013.
17. 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, Dec 2011.
18. [Xiaoming Fu](#), Henning Schulzrinne, Hannes Tschofenig, Christian Dickmann and Dieter Hogrefe, Overhead and Performance Study of the General Internet Signaling Transport (GIST) Protocol, **IEEE/ACM Transactions on Networking**, 17(1): 158-171, Feb. 2009.
19. Qazi Mussabbir, Wenbing Yao, Zeyun Niu and [Xiaoming Fu](#), Optimized FMIPv6 using IEEE 802.21 MIH Services in Vehicular Networks, **IEEE Transactions on Vehicular Technology**, 56(6): 3397-3407, Nov. 2007.
20. Sripriya Srikant Adhatarao, Mayutan Arumaiturai, Dirk Kutscher, [Xiaoming Fu](#), ISI: Integrate Sensor Networks to Internet with ICN, **IEEE Internet of Things Journal**, 5(2): 2327-4662, Mar 2018
21. 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.
22. Konglin Zhu, Wenting Zhi, Lin Zhang, Xu Chen, [Xiaoming Fu](#), Social-Aware Incentivized Caching for D2D Communications. **IEEE Access**, 4: 7585-7593, 2016.
23. [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.
24. Fei Zhang, Guangming Liu, [Xiaoming Fu](#), Ramin Yahyapour, A Survey on Virtual Machine Migration: Challenges, Techniques and Open Issues, **IEEE Communications Surveys and Tutorials**, DOI: 10.1109/COMST.2018.2794881, Jan. 2018.
25. Deguang Le, [Xiaoming Fu](#) and Dieter Hogrefe. A Review of Mobility Support Paradigms for the Internet, **IEEE Communications Surveys and Tutorials**, 8(1): 38-51, 1st Quarter 2006.
26. 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.
27. [Xiaoming Fu](#), Henning Schulzrinne, Attila Bader, Dieter Hogrefe, Cornelia Kappler, Georgios Karagiannis, Hannes Tschofenig and Sven Van den Bosch. NSIS: A New Extensible IP Signaling Protocol Suite, **IEEE Communications Magazine**, Topics in Internet Technology, 43(10): 133-141, Oct. 2005.
28. Chenxi Yang, Yang Chen, Qingyuan Gong, Xinlei He, Yu Xiao, Yuhuan Huang, [Xiaoming Fu](#), Understanding the Behavioral Differences Between American and German Users: A Data-Driven Study. **Big Data Mining and Analytics**, IEEE (accepted).
29. Konglin Zhu, Wenzhong Li, [Xiaoming Fu](#), Jan Nagler, How do online social networks grow? **PLoS One**, June 18, 2014.
30. Fang-Chun Kuo and [Xiaoming Fu](#), Probe-Aided MulTCP: An Aggregate Congestion Control Mechanism, **ACM SIGCOMM Computer Communication Review**, 38(1): 19-28, Jan 2008.
31. Prasad S Abhinandan, David Koll, Jesus Omana Iglesias, Jordi Arjona Aroca, Volker Hilt and [Xiaoming Fu](#), RConf(PD): Automated Resource Configuration of Complex Services in the Cloud, **Future Generation Computer Systems**, DOI: S0167739X17314231, Elsevier, Feb 2018 (in press).
32. Fei Zhang, [Xiaoming Fu](#), Ramin Yahyapour, LayerMover: Fast Virtual Machine Migration over WAN with Three-Layer Image Structure, **Future Generation Computer Systems**, 83: 37-49, Elsevier, June 2018.
33. Song Yang, Philipp Wieder, Ramin Yahyapour, [Xiaoming Fu](#), Energy-Aware Provisioning in Optical Cloud Networks. **Computer Networks**, 118: 78-95, Elsevier, May 2017.
34. Konglin Zhu, Wenzhong Li, [Xiaoming Fu](#), Lin Zhang, Data routing strategies in opportunistic mobile social networks: Taxonomy and open challenges, **Computer Networks**, 93: 183–198, Elsevier, Dec. 2015.
35. Haomin Yang, Yaoxue Zhang, Yuezhi Zhou, [Xiaoming Fu](#), Hao Liu, Athanasios V. Vasilakos, Provably Secure Three-Party Authenticated Key Agreement Protocol Using Smart Cards, **Computer Networks**, 58(15): 29-38, Elsevier, Jan 2014.
36. [Xiaoming Fu](#), Hannes Tschofenig and Dieter Hogrefe, Beyond QoS Signaling: A New Generic IP Signaling Framework, **Computer Networks**, 50(17): 3416-3433, Elsevier, Dec. 2006.

37. 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.
38. Konglin Zhu, Wenzhong Li, [Xiaoming Fu](#), Rethinking Routing Information in Mobile Social Networks: Location-based or Social-based?, **Computer Communications**, 42: 24-37, Elsevier, Apr. 2014.

#### Peer-Reviewed Conference Papers (Selected)

1. Enhuan Dong, [Xiaoming Fu](#), Mingwei Xu and Yuan Yang, DCMPTCP: Host-based Load Balancing for Datacenters, 38th IEEE International Conference on Distributed Computing Systems (**ICDCS 2018**), Vienna, Austria, July 2018.
2. Kun Qiu, Jing Yuan, Jin Zhao, Xin Wang, Stefano Secci and [Xiaoming Fu](#), Fast Lookup Is Not Enough: Towards Efficient and Scalable Flow Entry Updates for TCAM-based OpenFlow Switches, 38th IEEE International Conference on Distributed Computing Systems (**ICDCS 2018**), Vienna, Austria, July 2018.
3. Tao Zhao, Hong Huang, [Xiaoming Fu](#), Identifying Topical Opinion Leaders in Social Community Question Answering, 23rd International Conference on Database Systems for Advanced Applications (**DASFAA 2018**), Gold Coast, Australia, May 2018.
4. Qian Zhou, Yang Chen, Chuanhao Ma, Fei Li, Yu Xiao, Xin Wang and [Xiaoming Fu](#), Measurement and Analysis of the Reviews in Airbnb, **IFIP Networking 2018**, Zurich, Switzerland, IEEE Press, May 2018.
5. Hong Huang, Bo Zhao, Hao Zhao, Zhou Zhuang, Zhenxuan Wang, Xiaoming Yao, Xinggong 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.
6. Sameer G Kulkarni, Wei Zhang, Jinho Hwang, Shriram Rajagopalan, K. K. Ramankrishnan, Timothy Wood, Mayutan Arumathurai, [Xiaoming Fu](#), NFVnice: Dynamic Backpressure and Scheduling for NFV Service Chains, ACM **SIGCOMM 2017**.
7. Fengli Xu, Zhen Tu, Yong Li, Pengyu Zhang, [Xiaoming Fu](#), Depeng Jin, Trajectory Recovery from Ash: User Privacy Is NOT Preserved in Aggregated Mobility Data, **WWW 2017**.
8. Yang Chen, Cong Ding, Jiyao Hu, Ruichuan Chen, Pan Hui, [Xiaoming Fu](#), Building and Analyzing a Global Co-Authorship Network Using Google Scholar Data, WWW 2017 Companion - 4th WWW Workshop on Big Scholarly Data (**BigScholar 2017**).
9. Prasad S Abhinandan, 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**).
10. Lingjun Pu, Xu Chen, Jingdong Xu, [Xiaoming Fu](#), Crowdlet: Optimal Worker Recruitment for Self-Organized Mobile Crowdsourcing, IEEE **INFOCOM 2016**.
11. Chao Wu, Xu Chen, Yuezhi Zhou, Ningyuan Lee, [Xiaoming Fu](#), Yaoxue Zhang, Spice: Socially-Driven Learning-Based Mobile Media Prefetching, IEEE **INFOCOM 2016**.
12. Narisu Tao, Xu Chen, [Xiaoming Fu](#), AS Path Inference: From Complex Network Perspective, **IFIP Networking 2015**.
13. David Koll, Jun Li, [Xiaoming Fu](#), SOUP: An Online Social Network by the People, for the People, 15<sup>th</sup> ACM/IFIP/USENIX International Middleware Conference (**Middleware 2014**).
14. Mayutan Arumathurai, Jiachen Chen, Edo Monticelli, [Xiaoming Fu](#), K. K. Ramakrishnan, Exploiting ICN for Flexible Management of Software-Defined Networks, 1<sup>st</sup> ACM Conference on Information-Centric Networking (**ICN 2014**) (best paper award)
15. Hong Huang, Jie Tang, Sen Wu, Lu Liu, [Xiaoming Fu](#), Mining Triadic Closure Patterns in Social Networks, 23<sup>rd</sup> International World Wide Web Conference (**WWW 2014**)
16. Lei Jiao, Jun Li, Wei Du, [Xiaoming Fu](#), Multi-Objective Data Placement for Multi-Cloud Socially Aware Services, IEEE **INFOCOM 2014**.
17. 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**.
18. David Koll, Jun Li, Joshua Stein, [Xiaoming Fu](#), On the State of OSN-based Sybil Defenses, **IFIP Networking 2014**.
19. Yu Cao, Mingwei Xu, [Xiaoming Fu](#), Enhuan Dong, Explicit Multipath Congestion Control for Data Center Networks, 9<sup>th</sup> ACM Int'l Conf. on emerging Networking EXperiments and Technologies (**CoNEXT 2013**).
20. Florian Tegeler, [Xiaoming Fu](#), Giovanni Vigna and Christopher Krügel, BotFinder: Finding Bots in Network Traffic without Deep Packet Inspection, ACM **CoNEXT 2012**.
21. Yu Cao, Mingwei Xu, [Xiaoming Fu](#), Delay-based Congestion Control for Multipath TCP, IEEE **ICNP 2012**.
22. Lei Jiao, Jun Li, Tianyin Xu, [Xiaoming Fu](#), Cost Optimization for Online Social Networks on Geo-Distributed Clouds, IEEE International Conference on Network Protocols (**ICNP 2012**).
23. Jiachen Chen, Mayutan Arumathurai, [Xiaoming Fu](#), and K. K. Ramakrishnan, G-COPSS: A Content Centric Communication Infrastructure for Gaming, IEEE **ICDCS 2012**.
24. Cong Ding, Yang Chen, Tianyin Xu, [Xiaoming Fu](#), CloudGPS: A Scalable and ISP-Friendly Server Selection Scheme in Cloud Computing Environments, IEEE/ACM **IWQoS 2012**.
25. Tianyin Xu, Yang Chen, Lei Jiao, Ben Y. Zhao, Pan Hui, [Xiaoming Fu](#), Scaling Microblogging Services with Divergent Traffic Demands, ACM/IFIP/USENIX **Middleware 2011**.
26. Jiachen Chen, Mayutan Arumathurai, Lei Jiao, [Xiaoming Fu](#), K. K. Ramakrishnan, COPSS: An Efficient Content Oriented Publish/Subscribe System, ACM/IEEE **ANCS 2011**.



27. Dan Li, Mingwei Xu, Hongze Zhao, Xiaoming Fu, Building Mega Data Centers from Heterogeneous Containers, **IEEE ICNP 2011**.
28. Jin Zhao, Xinya Zhang, Xin Wang, Yiaodong Deng, and Xiaoming Fu, Exploiting Graphics Processors for High-performance IP Lookup in Software Routers, **IEEE INFOCOM 2011**, mini-conference.
29. Tianyin Xu, Baoliu Ye, Qinhui Wang, Wenzhong Li, Sanglu Lu, Xiaoming Fu, APEX: A Personalization Framework to Improve Quality of Experience for DVD-like Functions in P2P VoD Applications, **IEEE IWQoS 2010**.
30. Jianhua He, Xiaoming Fu and Zuoying Tang, End-to-End Versus Hop-by-Hop Soft State Refresh for Multi-hop Signaling System, **IEEE ICNP 2009**.
31. Xiaoming Fu, and Jon Crowcroft, GONE: an Infrastructure Overlay for Resilient, DoS-Limiting Networking, **ACM NOSSDAV 2006**.
32. Xiaoming Fu, Henning Schulzrinne, Hannes Tschofenig, Christian Dickmann and Dieter Hogrefe. Overhead and Performance Study of the General Internet Signaling Transport (GIST) Protocol, **IEEE INFOCOM 2006**.
33. Xiaoming Fu, Dieter Hogrefe and Sebastian Willert. Implementation and Evaluation of the Cross-Application Signaling Protocol (CASP), **IEEE ICNP 2004**.

#### **Edited Conference Proceedings and Journal Special Issues**

1. Xiaoming Fu, Andrea Passarella, Daniele Quercia, Alessandra Sala, Thorsten Strufe. Special Issue on "Online Social Networks". Computer Communications, Elsevier, 73: 163-166, 2016.
2. Jun Guo, Sung Ho Cho, Xiaoming Fu, Nirwan Ansari, Hong Ji. Special Issue on "Mobile Internet: content, security and terminal". International Journal of Communication Systems, Wiley & Sons, 29(14), 2016.
3. Xiaoming Fu, Stefano Secci, Dijiang Huang, Rittwik Jana. Feature Topic on "Mobile cloud computing", **IEEE Communications Magazine**, 53(3), 2015.
4. Xiaoming Fu, Yang Chen, Guy Leduc, Laurent Mathy. Special Issue on "Measurement-based optimization of P2P networking and applications". Computer Networks, Elsevier, 56(3), 2012.
5. Xiaoming Fu, Martin Stiernerling, Henning Schulzrinne, Special Issue on "Implications and Control of Middleboxes in the Internet", **IEEE Network**, Sept/Oct 2008.
6. 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
7. 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
8. 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
9. Xiaoming Fu, Puneet Sharma, Dijiang Huang, Deep Medhi (eds.), Proc. of IEEE 2nd International Conference on Cloud Networking (CloudNet'13), San Francisco, CA, USA, Nov. 11-13, 2013. ISBN 978-1-4799-0566-9
10. Xiaoming Fu, Volker Hilt, Tilman Wolf, Lixia Zhang, and Zhi-Li Zhang (eds.). Proc. of 21<sup>st</sup> IEEE International Conference on Network Protocols (ICNP'13), Göttingen, Oct. 7-10, 2013. ISBN 978-1-4799-1270-4
11. Xiaoming Fu, Peter Gloor, and Jie Tang (eds.). Proc. of 1st ACM International Workshop on Hot Topics on Interdisciplinary Social Networks Research (HotSocial 2012), ACM KDD 2012, Beijing, China, Aug. 2012. ISBN 978-1-4503-1549-4
12. Xiaoming Fu, Rittwik Jana, and K. K. Ramakrishnan (eds.). Proc. of 7th ACM Workshop on Mobility in the Evolving Internet Architecture (MobiArch'12), Istanbul, Turkey, Aug. 2012. ISBN 978-1-4503-1526-5
13. Xiaoming Fu and Pan Hui (eds.). Proceedings of 1st ACM International Workshop on Hot Topics of Planet-Scale Mobility Measurements (HotPlanet'09), Krakow, Poland, June 2009. ISBN 978-1-60558-689-2
14. Xiaoming Fu, Katherine Guo, Sue Moon, Ryuji Wakikawa (eds.), Proc. of 2<sup>nd</sup> ACM Workshop on Mobility in the Evolving Internet Architecture (MobiArch'06), SIGCOMM 2007, Kyoto, Japan, Aug. 2007. ISBN 978-1-59593-784-8
15. Xiaoming Fu, Katherine Guo and Jon Crowcroft (eds.). Proc. of 1st ACM/IEEE Workshop on Mobility in the Evolving Internet Architecture (MobiArch'06), San Francisco, CA, Dec 2006. ISBN 1-59593-566-5

#### **Other Publications (Selected)**

1. Xiaoming Fu, Jar-Der Luo, and Margarete Boos (eds.), Social Network Analysis: Interdisciplinary Approaches and Case Studies, CRC Press, Taylor & Francis Group, Mar. 2017. ISBN 9781498736640.
2. Xiaoming Fu, From Resource Reservation to Extensible IP Signaling, Cuvillier Verlag, Dec. 2013, ISBN 9783954046010.
3. Kadangode K. Ramakrishnan, Mayutan Arumathurai, Xiaoming Fu, Network-Friendly Transmission Control Protocol patent (TCP) Methods, Apparatus and Articles of Manufacture, granted US patent, Publication No. US8824281 B2, Sept 2014.
4. Xiaoming Fu, Niklas Neumann, Jun Lei, Gong Zhang, Inter-domain handover mechanisms between network-based localized network mobility domains, Issued patent, No. WO/2010/000090, Jan. 2010.
5. Changpeng Fan, Andreas Festag, Xiaoming Fu, Cornelia Kappler, Holger Karl, Mirko Schramm, Gunter Schafer, Method for Carrying Out a QoS-oriented Handoff Between a First Mobile Node and a Second IP-based, Especially, Mobile IPv6-based, Communication Path, Between a Mobile Node (MN) and a

Corresponding Node (CN), granted patent, No. DE10196717D/EP1405540B1/US2004024041/WO03009624, 2004.

6. 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, Mar. 2011.
7. 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, Jan. 2011.
8. Tseno Tsenov, Hannes Tschofenig, Xiaoming Fu (ed.), Cedric Aoun, and Elwyn Davies, General Internet Signaling Transport (GIST) State Machine, Internet Engineering Task Force, **RFC 5972**, Next Steps in Signaling (NSIS) Working Group, Oct. 2010.
9. Jukka Manner, Xiaoming Fu, Analysis of Existing Quality-of-Service Signaling Protocols, Internet Engineering Task Force, **RFC 4094**, Next Steps in Signaling (NSIS) Working Group, May 2005.
10. Mayutan Arumathurai, Jiachen Chen, Xiaoming Fu, K. K. Ramakrishnan, Jan Seedorf, Enabling Publish/Subscribe in ICN, IETF draft (draft-jiachen-icn-pubsub-00), July 2014.
11. Mayutan Arumathurai, Xiaoming Fu and K. K. Ramakrishnan, LEDBAT architecture framework consisting of pluggable components, IETF draft (draft-mayutan-ledbat-congestionarchitecture-00), Mar 2010.
12. Niklas Neumann, Xiaoming Fu, Diameter Application for Authentication and Authorization in Web Applications. IETF draft (draft-neumann-dime-webauth-01), July 2009.
13. Niklas Neumann, Xiaoming Fu, Jun Lei, Gong Zhang, Inter-Domain Handover and Data Forwarding between Proxy Mobile IPv6 Domains. IETF draft (draft-neumann-netlmm-inter-domain-00), July 2008.
14. S. Thiruvengadam, H. Tschofenig, Frank Le, Niklas Steinleitner, and Xiaoming Fu, Mobile IPv6 - NSIS Interaction for Firewall Traversal. IETF draft (draft-thiruvengadam-nsis-mip6-fw-05), Oct 2006.
15. Jun Lei, Xiaoming Fu, Xiaodong Yang and Dieter Hogrefe, DMMP: Dynamic Mesh-based Overlay Multicast Protocol. IETF draft (draft-lei-samrg-dmmp-00), June 2006.
16. Xiaoming Fu, Ingo Juchem, Christian Dickmann and Hannes Tschofenig, Design Options of NSIS Diagnostics NSLP, draft-fu-nsis-diagnostics-nslp-01, Mar 2006.
17. Xiaoming Fu, John Loughney, Context Transfer Using GIST, IETF draft (draft-fu-cxtp-gist-00), Oct 2005
18. Xiaoming Fu, Rene Soltwisch, A Proposal for General Traceroute Over Tunnels, IETF draft (draft-fu-ccamp-traceroute-00), June 2003.
19. Henning Schulzrinne, Hannes Tschofenig, Xiaoming Fu, Andrew McDonald, CASP – Cross-Application Signaling Protocol, IETF Draft (<https://tools.ietf.org/html/draft-schulzrinne-nsis-casp-00>), Sept 2002
20. Henning Schulzrinne, Hannes Tschofenig, Xiaoming Fu, Jochen Eisl, A Quality-of-Service Resource Allocation Client for CASP, IETF Draft (<https://tools.ietf.org/html/draft-schulzrinne-nsis-casp-qos-00>), Sept 2002

#### **Publications According to Research Areas (since 2010):**

On urban informatics, spatiotemporal data analytics, (mobile) social networks, social behavior, social computing:

1. Chenxi Yang, Yang Chen, Qingyuan Gong, Xinlei He, Yu Xiao, Yuhuan Huang, Xiaoming Fu, Understanding the Behavioral Differences Between American and German Users: A Data-Driven Study. Big Data Mining and Analytics, IEEE, DOI: 10.26599/BDMA.2018.9020024 (in press).
2. Qingyuan Gong, Yang Chen, Xinlei He, Zhou Zhuang, Tianyi Wang, Hong Huang, Xin Wang and 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 (in press)
3. Jiaying Kou, Xiaoming Fu, Jiahua Du, Hua Wang, and Geordie Zhang, Detecting Housing Market Behaviour from a Microscopic Perspective, IEEE 27th International Conference on Computer Communications and Networks (ICCCN 2018), Hangzhou, China, July-August 2018.
4. Bo Zhao, Hong Huang, Jar-Der Luo, Xinggang Wang, Xiaoming Yao, Ramin Yahyapour, Zhenxuan Wang, Xiaoming Fu, A Preliminary Study of E-commerce User Behavior Based on Mobile Big Data, IEEE 87th Vehicular Technology Conference (VTC 2018-Spring), Porto, Portugal, June 2018.
5. Qian Zhou, Yang Chen, Chuanhao Ma, Fei Li, Yu Xiao, Xin Wang and Xiaoming Fu, Measurement and Analysis of the Reviews in Airbnb, IFIP Networking 2018, Zurich, Switzerland, IEEE Press, May 2018.
6. Tao Zhao, Hong Huang, Xiaoming Fu, Identifying Topical Opinion Leaders in Social Community Question Answering, 23rd International Conference on Database Systems for Advanced Applications (DASFAA 2018), Gold Coast, Australia, May 2018.
7. 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.
8. Xiaoming Fu, Hong Huang, Xiang-Yang Li, Haisheng Tan, Jie Tang, A Comparative Analysis of School Pupils' Daily Habits in Germany and China. IEEE INFOCOM 2018 Workshop on Hot Topics in Planet-Scale Mobile Computing and Online Social Networking (HotPOST'18), Honolulu, HI, USA, April 2018.
9. 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, Mar. 2018.

10. 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*, 12(3), Article No. 30, Jan. 2018.
11. Xiang Lan, Yuezhi Zhou, Di Zhang, Xinggang 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.
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. Hong Huang, Shichang Ding, Taoxiang Liu, Xu Wang, Xiaoming Fu, Understanding Urban Mobility from Public Transportation Perspective Using Smart-Card Data: The Case of Shanghai, *INSNA Sunbelt 2017*, Beijing, China, June 2017.
14. Hong Huang, Lu Zheng, Xiaoming Fu, The Life Cycle of One Triad: An Alternative Perspective from Weibo, *INSNA Sunbelt 2017*, Beijing, China, June 2017.
15. 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.
16. 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.
17. 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.
18. 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.
19. Xiaoming Fu, Jar-Der Luo, Margarete Boos (eds.), *Social Network Analysis: Interdisciplinary Approaches and Case Studies*, CRC Press, Taylor & Francis Group, ISBN 1498736645, Mar 2017.
20. 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 1498736645, Mar 2017.
21. 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 1498736645, Mar 2017.
22. 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 1498736645, Mar 2017.
23. 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.
24. 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.
25. 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, April 2016.
26. Xiaoming Fu, Andrea Passarella, Daniele Quercia, Alessandra Sala, Thorsten Strufe, Online Social Networks (Guest editorial), *Computer Communications*, Volume 73, Part B, Pages 163–166, Elsevier, January 2016.
27. Hong Huang, Jie Tang, Lu Liu, JarDer Luo, Xiaoming Fu, Triadic Closure Pattern Analysis and Prediction in Social Networks, *IEEE Transactions on Knowledge and Data Engineering*, 27(12): 3374-3389, IEEE, December 2015.
28. Konglin Zhu, Wenzhong Li, Xiaoming Fu, Lin Zhang, Data routing strategies in opportunistic mobile social networks: Taxonomy and open challenges, *Computer Networks*, 93(part 1): 183-198, Elsevier, Dec 2015.
29. Wei Du, Yongjun Liao, Narisu Tao, Pierre Geurts, Xiaoming Fu, Guy Leduc, Rating Network Paths for Locality-Aware Overlay Construction and Routing, *IEEE/ACM Transactions on Networking*, 23(5): 1661-1673, October 2015.
30. Konglin Zhu, Wenzhong Li, Xiaoming Fu, Lin Zhang, VIRO: A Virtual Routing Method for Eliminating Dead End in Opportunistic Mobile Social Networks, *2015 IEEE International Conference on Communications (ICC 2015)*, London, UK, IEEE, June 2015.
31. Narisu Tao, Xu Chen, Xiaoming Fu, AS Path Inference: From Complex Network Perspective, *IFIP Networking 2015*, Toulouse, France, May 2015.

32. David Koll, Jun Li, Xiaoming Fu, SOUP: An Online Social Network By The People, For The People, 15th Annual ACM/IFIP/USENIX Middleware Conference (Middleware 2014), Bordeaux, France, Dec 2014.
33. Stephan Sigg, Xiaoming Fu, Social Opportunistic Sensing and Social Centric Networking - Enabling technology for Smart Cities, ACM International Workshop on Wireless and Mobile Technologies for Smart Cities (WiMobCity 2014), in conjunction with MobiHoc 2014, Philadelphia, PA, USA, August 2014.
34. David Koll, Jun Li, Joshua Stein, Xiaoming Fu, On the State of OSN-based Sybil Defenses, IFIP Networking 2014, Trondheim, Norway, IEEE, June 2014.
35. Konglin Zhu, Wenzhong Li, Xiaoming Fu, Jan Nagler, How do online social networks grow?, PLoS ONE, 9(6): e100023, doi:10.1371/journal.pone.0100023, June 2014.
36. Farshid Hassani Bijarbooneh, Wei Du, Edith Ngai, Xiaoming Fu, Energy-Efficient Sensor Selection for Data Quality and Load Balancing in Wireless Sensor Networks, IEEE/ACM International Symposium on Quality of Service (IWQoS 2014), Hong Kong, pages 338-343, IEEE, May 2014.
37. Konglin Zhu, Wenzhong Li, Xiaoming Fu, Rethinking Routing Information in Mobile Social Networks: Location-based or Social-based?, Computer Communications, 42: 24-37, Elsevier, April 2014.
38. 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.
39. Hong Huang, Jie Tang, Sen Wu, Lu Liu, Xiaoming Fu, Mining Triadic Closure Patterns in Social Networks, 23rd International World Wide Web Conference (WWW 2014), Web Science Track, Seoul, Korea, April 2014.
40. 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, Oct 2013.
41. Konglin Zhu, Wenzhong Li, Xiaoming Fu, Modeling population growth in online social networks, Complex Adaptive Systems Modeling, 1:14, doi:10.1186/2194-3206-1-14, Springer Verlag, June 2013.
42. 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)
43. 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.
44. Florian Tegeler, Xiaoming Fu, Giovanni Vigna and Christopher Krügel, Finding Bots in Network Traffic Without Deep Packet Inspection, The 8th ACM International Conference on emerging Networking Experiments and Technologies (CoNEXT 2012), Nice, France, ACM, December 2012.
45. Lei Jiao, Jun Li, Tianyin Xu and Xiaoming Fu, Cost Optimization for Online Social Networks on Geo-Distributed Clouds, the 20th IEEE International Conference on Network Protocols (ICNP 2012), Austin, Texas, USA, November 2012.
46. Sufian Hameed, Alexander Wolf, Konglin Zhu, Xiaoming Fu, Evaluation of Human Altruism Using a DTN-based Mobile Social Network Application, 5th workshop on Digital Social Networks (DSN 2012) in conjunction with Gesellschaft für Informatik (GI 2012), Braunschweig, Germany, September 2012.
47. Lianghao Dai, Jarder Luo, Xiaoming Fu, Zhichao Li, Predicting offline behaviors from online features — an ego-centric dynamical network approach, Proceedings of First ACM International Workshop on Interdisciplinary Social Networks Research (HotSocial 2012), Beijing, China, in conjunction with ACM KDD 2012, ISBN 978-1-4503-1549-4, August 2012.
48. Sufian Hameed, Tobias Kloht, Xiaoming Fu, iSATS: Leveraging Identity Based Sender Authentication for Spam Mitigation, International Conference on Security and Cryptography (Secrypt), Rome, Italy, July 2012.
49. 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.
50. 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, Dec. 2011.
51. Sufian Hameed, Xiaoming Fu, Pan Hui and Nishanth Sastry, LENS: Leveraging Social Networking and Trust to Prevent Spam Transmission, The Second IEEE Workshop on Security & Trust in the Future Internet (FIST'11), Co-located with IEEE ICNP 2011, Vancouver, BC Canada, October 2011.
52. Konglin Zhu, Pan Hui, Yang Chen, Xiaoming Fu, Wenzhong Li, Exploring User Social Behaviors in Mobile Social Applications, 4th ACM Workshop on Social Network Systems (SNS 2011), in conjunction with ACM EuroSys 2011, Salzburg, Austria, April 2011.
53. Tianyin Xu, Baoliu Ye, Qinhui Wang, Wenzhong Li, Sanglu Lu, Xiaoming Fu, APEX: A Personalization Framework to Improve Quality of Experience for DVD-like Functions in P2P VoD Applications, the 18th IEEE International Workshop on Quality of Service (IWQoS 2010), Beijing, China, IEEE, June 2010.

On cloud computing, data centers, mobile and edge computing, Internet-of-Things, DTN, vehicular networks:

1. Xu Chen, Wenzhong Li, Sanglu Lu, Zhi Zhou, Xiaoming Fu, Efficient Resource Allocation for On-Demand Mobile-Edge Cloud Computing, IEEE Transactions on Vehicular Technology, DOI: 10.1109/TVT.2018.2846232 (in press).

2. Fei Zhang, Guangming Liu, Xiaoming Fu, Ramin Yahyapour, A Survey on Virtual Machine Migration: Challenges, Techniques and Open Issues, *IEEE Communications Surveys and Tutorials*, DOI: 10.1109/COMST.2018.2794881 (in press).
3. Prasad S Abhinandan, David Koll, Jesus Omana Iglesias, Jordi Arjona Aroca, Volker Hilt and Xiaoming Fu, RConf(PD): Automated Resource Configuration of Complex Services in the Cloud, *Future Generation Computer Systems*, DOI: S0167739X17314231, Elsevier (in press).
4. Di Zhang, Yuezhi Zhou, Xiang Lan, Yaoxue Zhang, Xiaoming Fu, AHT: Application-Based Handover Triggering for Saving Energy in Cellular Networks, 15<sup>th</sup> Annual IEEE International Conference on Sensing, Communication and Networking (SECON 2018), Hong Kong, June 2018.
5. Fei Zhang, Xiaoming Fu, Ramin Yahyapour, LayerMover: Fast Virtual Machine Migration over WAN with Three-Layer Image Structure, *Future Generation Computer Systems*, 83: 37-49, Elsevier, June 2018.
6. 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.
7. 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.
8. Sripriya Srikant Adhatarao, Mayutan Arumaithurai, 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.
9. 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.
10. Song Yang, Xiaoming Fu, Philip Wieder, Ramin Yahyapour, Energy-Aware Provisioning in Optical Cloud Networks, *Computer Networks*, Elsevier, 118: 78-95, May 2017.
11. 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.
12. 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.
13. Prasad S Abhinandan, David Koll, Jesus Omana Iglesias, Jordi Arjona Aroca, Volker Hilt, 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, May 2017.
14. 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*, Series on Green Communications and Networking, 35(4): 1-15, Apr 2017.
15. 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, Mar 2017.
16. 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, October 2016.
17. Konglin Zhu, Wenting Zhi, Lin Zhang, Xu Chen, Xiaoming Fu, Social-Aware Incentivized Caching for D2D Communications, *IEEE Access*, Vol. 4, pages 7585-7593, DOI: 10.1109/ACCESS.2016.2618940, Oct 2016.
18. 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.
19. 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*, DOI: 10.1109/TETC.2016.2581704, IEEE, June 2016.
20. Lingjun Pu, Xu Chen, Jindong Xu, Xiaoming Fu, sNDN: a Social-aware Named Data Framework for Cooperative Content Retrieval via D2D Communications, 10th ACM International Workshop on Mobility in the Evolving Internet Architecture (MobiArch), in conjunction with ACM MobiCom 2015, Paris, France, Sept 2015.
21. Xiaoming Fu, Stefano Secci, Dijiang Huang, Rittwik Jana, Mobile Cloud Computing (guest editorial), *IEEE Communications Magazine*, Feature Topic on Mobile Cloud Computing, IEEE, March 2015.
22. Wenzhong Li, Yuefei Hu, Xiaoming Fu, Sanglu Lu, Daoxu Chen, Cooperative Positioning and Tracking in Disruption Tolerant Networks, *IEEE Transactions on Parallel and Distributed Systems*, 26(2): 382-391, DOI: 10.1109/TPDS.2014.2310471, IEEE, February 2015.
23. Konglin Zhu, Wenzhong Li, Xiaoming Fu, SMART: A Social and Mobile Aware Routing Strategy for Disruption Tolerant Networks, *IEEE Transactions on Vehicular Technology*, Vol. 63, No. 7, pages 3423-3434, <http://dx.doi.org/10.1109/TVT.2014.2298494>, IEEE, July 2014.
24. Dan Li, Hongze Zhao, Mingwei Xu, Xiaoming Fu, Revisiting the Design of Mega Data Centers: Considering Heterogeneity among Containers, *IEEE/ACM Transactions on Networking*, Vol. 22, No. 5, Pages 1503-1515, DOI: 10.1109/TNET.2013.2280764, IEEE, May 2014.



25. Yuan Zhang, Xiaoming Fu, K. K. Ramakrishnan, Fine-Grained Multi-Resource Scheduling in Cloud Datacenters, The 20th IEEE International Workshop on Local and Metropolitan Area Networks (LANMAN 2014), IEEE, May 2014.
26. 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.
27. Haomin Yang, Yaoxue Zhang, Yuezhi Zhou, Xiaoming Fu, Hao Liu, Athanasios V. Vasilakos, Provably Secure Three-Party Authenticated Key Agreement Protocol Using Smart Cards, Computer Networks, <http://dx.doi.org/10.1016/j.comnet.2013.08.020>, 58(15): 29-38, Elsevier, January 2014.
28. 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.
29. Yuan Zhang, Hao Liu, Lei Jiao, Xiaoming Fu, To Offload or Not to Offload: An Efficient Code Partition Algorithm for Mobile Cloud Computing, 1st IEEE International Conference on Cloud Networking (CloudNet 2012), Paris, France, IEEE, November 2012.
30. Cong Ding, Yang Chen, Tianyin Xu, Xiaoming Fu, CloudGPS: A Scalable and ISP-Friendly Server Selection Scheme in Cloud Computing Environments, IEEE/ACM International Workshop on Quality of Service (IWQoS 2012), Coimbra, Portugal, IEEE, June 2012.
31. 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.

On information centric networking, software-defined networks, NFV, QoS, congestion control, routing, security:

1. Enhuan Dong, Xiaoming Fu, Mingwei Xu and Yuan Yang, DCMPTCP: Host-based Load Balancing for Datacenters, 38th IEEE International Conference on Distributed Computing Systems (ICDCS 2018), Vienna, Austria, July 2018.
2. Kun Qiu, Jing Yuan, Jin Zhao, Xin Wang, Stefano Secci and Xiaoming Fu, Fast Lookup Is Not Enough: Towards Efficient and Scalable Flow Entry Updates for TCAM-based OpenFlow Switches, 38th IEEE International Conference on Distributed Computing Systems (ICDCS 2018), Vienna, Austria, July 2018.
3. Ruidong Li, Kazuhisa Matsuzono, Hitoshi Asaeda and Xiaoming Fu, Consecutive Caching and Adaptive Retrieval for In-Network Big Data Sharing, IEEE International Conference on Communications (ICC 2018), Kansas City, MO, USA, IEEE, May 2018.
4. Sripriya Srikant Adhatarao, Mayutan Arumaithurai, Dirk Kutscher, Xiaoming Fu, ISI: Integrate Sensor Networks to Internet With ICN, IEEE Internet of Things Journal, 5(2): 2327-4662, IEEE, March 2018.
5. Sripriya Srikant Adhatarao, Mayutan Arumaithurai, Dirk Kutscher, Xiaoming Fu, NeMol: Network Mobility in ICN, In proceedings of Tenth IEEE International Conference on COMMunication Systems & NETWORKS (COMSNETS), January 2018.
6. 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.
7. 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, August 2017.
8. 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.
9. 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. 2017.
10. 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.
11. 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.
12. 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.
13. 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.
14. 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.
15. Qi Li, Xinwen Zhang, Qingji Zheng, Ravi Sandhu, Xiaoming Fu, LIVE: Lightweight Integrity Verification and Content Access Control for Named Data Networking, IEEE Transactions on Information Forensics and Security, 10(2): 308-320, February 2015.

16. Mayutan Arumathurai, Jiachen Chen, Edo Monticelli, Xiaoming Fu, K. K. Ramakrishnan, Exploiting ICN for Flexible Management of Software-Defined Networks, 1st ACM Conference on Information-Centric Networking (ICN 2014), Paris, France, September 2014. (Best paper award)
17. 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.
18. 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.
19. Jiachen Chen, Mayutan Arumathurai, Xiaoming Fu, K. K. Ramakrishnan, Reliable Publish/Subscribe in Content-Centric Networks, 3rd ACM SIGCOMM Workshop on Information-Centric Networking (ICN 2013), Hong Kong, August 2013.
20. Yu Cao, Mingwei Xu and Xiaoming Fu, Delay-based Congestion Control for Multipath TCP, Proc of 20th IEEE International Conference on Network Protocols (ICNP 2012), Austin, Texas, USA, November 2012.
21. Jiachen Chen, Mayutan Arumathurai, Xiaoming Fu, K. K. Ramakrishnan, Coexist: Integrating Content Oriented Publish/Subscribe Systems with IP, ACM/IEEE ANCS 2012, ACM, October 2012.
22. Jiachen Chen, Mayutan Arumathurai, Xiaoming Fu, and K. K. Ramakrishnan, G-COPSS: A Content Centric Communication Infrastructure for Gaming, The 32nd IEEE International Conference on Distributed Computing Systems (ICDCS 2012), Macau, China, June 2012.
23. Shining Wu, Yang Chen, Xiaoming Fu, Jun Li, NCShield: Securing Decentralized, Matrix Factorization-Based Network Coordinate Systems, IEEE/ACM International Workshop on Quality of Service (IWQoS 2012), Coimbra, Portugal, IEEE, June 2012.
24. 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, Vol 8, Issue 4, IEEE, December 2011.
25. 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.
26. 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, Oct 2011.
27. 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.
28. Jin Zhao, Xinya Zhang, Xin Wang, Yiaodong Deng, Xiaoming Fu, Exploiting Graphics Processors for High-performance IP Lookup in Software Routers, IEEE INFOCOM, Mini-conference, Shanghai, China, Apr 2011.
29. Jun Lei, Lei Shi, Xiaoming Fu, An Experimental Analysis of Joost Peer-to-Peer VoD Service, Peer-to-Peer Networking and Applications, Volume 3, Number 4, Pages 351-362, Springer Verlag, December 2010.
30. Niklas Neumann, Xiaoming Fu, Gong Zhang, ARA: A Routing and Forwarding Scheme for Coordinated Wide Area Mobility, IEEE International Conference on Communications (ICC) 2010, Cape Town, South Africa, June 2010.
31. Jun Lei, Xiaoming Fu, and Dieter Hogrefe, D-MORE: Dynamic Mesh-based Overlay Peer-to-Peer Infrastructure, Computer Communications, 33(10): 1191-1201, Elsevier, June 2010.

### **Current/Recent Collaborators (Selected)**

#### Computer Science/Electrical Engineering (Academia):

- Henning Schulzrinne, Columbia University and FCC, USA
- Lixia Zhang & Mario Gerla, UCLA, USA
- K. K. Ramakrishnan, UC Riverside, USA
- Ben Y. Zhao, University of Chicago, USA
- Jun Li & Lei Jiao, Univ of Oregon, USA
- Hua Wang & Yanchun Zhang, Victoria University, Australia
- Bogdan Gabrys & Guandong Xu, University of Technology Sydney, Australia
- Jon Crowcroft & Cecilia Mascolo, University of Cambridge, UK
- George Pavlou & Ioannis Psaras, University College London, UK
- Nishanth Sastry, King's College London, UK
- Jianhua He, Aston University, UK
- Jiangzhou Wang, Kent University, UK
- Nicola Blefari Melazzi, Univ of Roma2, Italy
- Guido Maier & Achille Pattavina, Politecnico di Milano, Italy
- Stefano Secci & Guy Pujolle, Sorbonne Univ/UPMC, France
- Noel Crespi, Institut Mines Telecom/Telecom SudParis, France
- Stephan Sigg, Aalto Univ, Finland
- Jussi Kangasharju & Sasu Tarkoma, Univ of Helsinki, Finland
- Edith Ngai, Yi Wang, Uppsala Univ., Sweden
- Michael Welzl, U. Oslo, Norway

- Yuming Jiang, NTNU, Norway
- Filip Idzikowski, Poznan U of Tech, Poland
- Wolfgang Nejdl, Univ of Hannover/L3S, Germany
- Matthias Wählisch, Freie Universität Berlin, Germany
- Krishna Gummedi, MPI for Software Systems, Germany
- Roy Friedman, Technion – Israel Institute of Technology, Israel
- Tohru Asami, Univ. Tokyo, Japan
- Toru Hasegawa & Teruo Higashino, Osaka Univ, Japan
- Tutomu Murase, Nagoya Univ., Japan
- Yusheng Ji, National Institute of Informatics, Japan
- Celimuge Wu, Univ. of Electro-Communications, Japan
- Yuezhi Zhou, Yaoxue Zhang, Jie Tang, Yong Li, Dan Li & Mingwei Xu, Tsinghua Univ., China
- Dongyan Zhao, Lei Zou & Kai Lei, Peking Univ., China
- Konglin Zhu & Lin Zhang, BUPT, China
- Wenzhong Li, Lei Xie & Sanglu Lu, Nanjing Univ, China
- Xin Wang, Jin Zhao, Yang Chen, Yuedong Xu, Xiang Li & Xiangyang Xue, Fudan Univ, China
- XiangYang Li & Haisheng Tan, Univ of Sci & Tech of China
- Xu Chen, Sun Yat-sen Univ, China
- Hong Huang, Hanhua Chen & Hai Jin, Huazhong Univ of Sci. & Tech., China
- Pan Hui, University of Helsinki, Finland & Hong Kong University of Science and Technology, Hong Kong
- Chuan Wu, University of Hong Kong, Hong Kong
- Dah Ming Chiu, Chinese University of Hong Kong, Hong Kong
- Jiannong Cao, Hong Kong Polytechnic University, Hong Kong
- Michele Nogueira, UFPR, Brazil

#### Computer Science (Industry):

- Katherine Guo, Nokia Bell Labs, USA
- Luca Muscariello, Cisco, France
- Ivano Guardini, Telecom Italia Lab, Italy
- Börje Ohlman, Ericsson Research, Sweden
- Astrid Undheim, Telenor, Norway
- Hannes Tschofenig, ARM Ltd, UK/Austria
- Volker Hilt, Nokia Bell Labs, Germany
- Rüdiger Geib, Deutsche Telekom, Germany
- Dirk Kutscher, Huawei Research, Germany
- Shining Wu, BMW IT, Germany
- Florian Jomrich, Opel, Germany
- Fabian Schneider, NEC Europe Labs, Germany
- Stefan Aust, NEC Communication Systems, Ltd, Japan
- Atsushi Tagami, KDDI Labs, Japan
- Xiaoming Yao & Xinggong Wang, China Telecom, China
- Kai Zheng, Huawei Research & Innovation Institute, China
- Miao Zhang, Baidu, China
- Hailue Lin, Alibaba, China
- Xiaobing Wang, Tencent, China

#### Interdisciplinary:

- Dario Farina, Neurorehabilitation Engineering, Imperial College London, UK
- Lutz Kolbe & Fabian Froese, Department of Business Management, Univ. of Göttingen, Germany
- Anita Schöbel, Institute of Numeric and Applied Mathematics, Univ of Göttingen, Germany
- Margarete Boos, Dept of Sociopsychology, Institute of Psychology, Univ of Göttingen, Germany
- Alexander Nagel, Faculty of Sociology, Univ of Göttingen, Germany
- Alexander Knohl, Chair of Bioclimatology, Faculty of Forestry, Univ of Göttingen, Germany
- Luise Poustka & Tim Friede, University Medical Center Göttingen, Germany
- Stephan Herminghaus & Marc Timme, MPI for Dynamic and Self-organization, Germany
- Christian Stegbauer, Institute of Sociology, Univ of Frankfurt, Germany
- Kai Fischbach, Faculty of Business- and Applied Informatics, Univ of Bamberg, Germany
- Christoph Menzel, Institute of Traffic Management, University of Applied Sciences Ostfalia, Germany
- Jan Nagler, Computational Physics for Engineering Materials Group, ETH Zurich, Switzerland
- Sophie Mützel, Institute of Sociology, Univ. of Lutzern, Switzerland
- Peter Gloor, MIT Sloan School of Management, USA
- Ronald Burt, Dept of Sociology, Business School, Univ of Chicago, USA
- Tine Köhler, Faculty of Business and Economics, University of Melbourne, Australia
- Jar-Der Luo & Lu Zheng, Department of Sociology, Tsinghua Univ, China
- Mian Zhang & Taoxiong Liu, School of Economics and Management, Tsinghua Univ, China
- Kaisheng Huang & Keqiang Li, Dept of Automotive Engineering, Tsinghua Univ, China

- Xin Yuan, School of Architecture, and Institute of Urban Planning, Tsinghua Univ, China
- Jiwen Song, School of Business, Renmin Univ of China
- Ying Fan, School of Complex Sciences, Beijing Normal Univ., China
- Xu Wang & Ruhua Zhang, Research Center for Public Transportation, Shandong Univ, China
- Jianxun Chu, School of Media Communications, Univ of Sci & Tech of China
- Zhiwei Wu, Center for Public Health Research, Medical School, Nanjing Univ, China