

Conference : August 28(Tue) - 30(Thu)

The SIGCOMM conference is a single-track meeting where authors present papers describing significant research contributions to the field of computer and data communication networks. Papers are reviewed by a distinguished technical program committee (TPC) of 56 researchers from 11 countries around the globe. SIGCOMM is a selective conference where full papers typically report novel results firmly substantiated by experimentation, simulation, or analysis.

Areas of interest include, but are not limited to:

- Analysis and design of network architectures and algorithms
- Experimental and measurement results from operational networks
- Fundamental insights into network and traffic characteristics
- Network fault-tolerance and reliability, debugging, and troubleshooting
- Network management and traffic engineering
- Network security, vulnerability, and defenses
- Network, transport, and application-layer protocols
- Networking issues for Web, multimedia, and gaming applications
- Operating system and other host support for networking
- Peer-to-peer, overlay, and content distribution networks
- Resource management, quality of service, and signaling
- Routing, switching, and addressing
- Tools and techniques for network measurement and simulation
- Wireless, mobile, ad-hoc, and sensor networks

Workshops : August 27(Mon) and August 31(Fri)

SIGCOMM workshops are focused, interactive forums where authors present preliminary results in emerging topics of interest among the broader SIGCOMM community.

This year's workshops include:

August 27 (Mon)

- Mobility in the Evolving Internet Architecture (MobiArch)
Chairs: Xiaoming Fu, Katherine Guo, Sue Moon, Ryuji Wakikawa
- Large Scale Attack Defense (LSAD)
Chairs: Hideki Imai, George Kesidis
- Networked Systems for Developing Regions (NSDR)
Chairs: Eric Brewer, Umar Saif

August 31 (Fri)

- Internet Network Management 2007 (INM)
Chairs: Chuck Kalmanek, Richard Mortier, Geoff Xie
- Peer-to-Peer Streaming and IPTV Systems (P2P-TV)
Chairs: Pablo Rodriguez, Ernst Biersack, Christos Gkantsidis
- IPv6 and the Future of the Internet (IPv6)
Chairs: Xiaowei Yang, Tatuya Jinmei

Kyoto and the venue

Kyoto was the ancient capital of Japan for approximately 1,000 years until 1867, and boasts thousands of historic temples and shrines as well as some of Japan's most beautiful gardens and palaces. Although now a modern city of 1.5 million inhabitants, Kyoto remains a center of traditional Japanese art and crafts, culture and cuisine.

The Kyoto International Conference Center, the venue, is a spacious conference complex surrounded by natural beauty and situated in the north of Kyoto City. The Kyoto Protocol on global warming was signed here in 1997.

www.sigcomm.org/sigcomm2007/

Conference Program

August 27 (Mon)

Workshops (MobiArch, LSAD, NSDR)	9:00 - 17:00
Newcomer's Session	17:00 - 18:00
Reception	17:00 - 19:00

August 28 (Tue)

Opening and Awards	9:00 - 9:15
Keynote Talk	9:15 - 10:00
Coffee Break	10:00 - 10:30
Session 1:Enterprise Networks	10:30 - 11:45

Ethane:Taking Control of the Enterprise

M. Casado(Stanford), M. Freedman(NYU), J. Pettit, N. McKeown(Stanford), S. Shenker(UCB)

Towards Highly reliable Enterprise Network Services via Inference of Multi-level Dependencies

P. Bahl, R. Chandra, A. Greenberg(Microsoft), S. Kandula(Microsoft/MIT), D. Maltz, M. Zhang (Microsoft)

Automating Cross-Layer Diagnosis of Enterprise Wireless Networks

Y. Cheng, M. Afanasyev, P. Verkaik(UCSD), P. Benko(Ericsson Research), J. Chiang, A. Snoeren, S. Savage, G. Voelker(UCSD)

Lunch	11:45 - 13:00
--------------	----------------------

Session 2:Network Applications	13:00 - 14:15
---------------------------------------	----------------------

Revealing Skype Traffic: when randomness plays with you

D. Bonfiglio, M. Mellia, M. Meo(Politecnico di Torino), D. Rossi(ENST France), P. Tofanelli(Politecnico di Torino)

BubbleStorm:Resilient, Probabilistic, and Exhaustive Peer-to-Peer Search

W. Terpstra, J. Kangasharju, C. Leng, A. Buchmann(TUD)

Securing Internet Coordinate Embedding Systems

M. Kaafar(INRIA), L. Mathy(Lancaster Univ./Univ. of Liege), C. Barakat(INRIA), K. Salamation(Lip6/EPFL), T. Turletti, W. Dabbous(INRIA)

Student Poster Session and Coffee Break	14:15 - 15:30
--	----------------------

Session 3:System Design	15:30 - 16:45
--------------------------------	----------------------

Reconciling Performance and Programmability in Networking Systems

J. Mudigonda(Univ. of Texas at Austin/HP Labs Palo Alto), H. Vin, S. Keckler(Univ. of Texas at Austin)

Supercharging PlanetLab - High Performance, Multi-Application, Overlay Network Platform

J. Turner, P. Crowley, J. Dehart, A. Freestone, B. Heller, F. Kuhms, S. Kumar, J. Lockwood, J. Lu, M. Wilson, C. Wiseman, D. Zar(Washington Univ.)

ProgME: Towards Programmable Network MEasurement

L. Yuan, C. Chuah, P. Mohapatra(UC Davis)

Community Session	16:45 - 17:15
--------------------------	----------------------

Business Meeting	17:15 - 18:15
-------------------------	----------------------

Student Dinner	19:00 - 21:30
-----------------------	----------------------

August 29 (Wed)

Session 4:Incentives	9:00 - 10:15
-----------------------------	---------------------

Efficient Network-wide SLA Compliance Monitoring

J. Sommers, P. Barford(Univ. of Wisconsin), N. Duffield(AT&T Labs), A. Ron(Univ. of Wisconsin)

Lottery Trees:Motivational Deployment of Networked Systems

J. Douceur, T. Moscibroda(Microsoft Research)

Can Internet Video-on-Demand Be Profitable?

C. Huang, J. Li(Microsoft Research), K. Ross(Polytechnic Univ.)

Coffee Break	10:15 - 10:45
---------------------	----------------------

Session 5:Routing	10:45 - 12:00
--------------------------	----------------------

In search for an appropriate granularity to model routing policy

W. Muehlbauer(TU Berlin), S. Uhlig, B. Fu(TU Delft), M. Meulle(France Telecom R&D), O. Maennel(Univ. of Adelaide)

Resolving Inter-Domain Policy Disputes

C. Ee(UCB), V. Ramachandran(Stevens Institute of Technology), B. Chun(UCB), K. Lakshminarayanan(IIT Madras), S. Shenker(UCB/CSI)

Trading Structure for Randomness in Wireless Opportunistic Routing

S. Chachulski, M. Jennings, S. Katti, D. Katabi(MIT)

Lunch	12:00 - 13:20
--------------	----------------------

Session 6:Alternative Architectures	13:20 - 15:00
--	----------------------

A Data-Oriented(and Beyond), Network Architecture

T. Koponen(ESI/HIT), M. Chawla, B. Chun, A. Ermolinskiy, K. Kim(UCB), S. Shenker(UCB/UCB), I. Stoica(UCB)

An End-Middle-End Architecture for a Secure Internet

S. Guha, P. Francis(Cornell)

CONMan:A Step Towards Network Manageability

H. Ballani, P. Francis(Cornell)

An Axiomatic Basis for Communication

M. Karsten, S. Keshav(Univ. of Waterloo), S. Prasad(IIT Dehli), M. Beg(Univ. of Waterloo)

Coffee Break	15:00 - 15:30
---------------------	----------------------

Session 7:Reliability	15:30 - 16:45
------------------------------	----------------------

Reliability as an Interdomain Service

H. Wang, Y. Yang, P. Liu(Yale), J. Wang, A. Gerber(AT&T), A. Greenberg(Microsoft)

Achieving Convergence-Free Routing using Failure-Carrying Packets

K. Lakshminarayanan, M. Caesar, M. Rangan(UCB), T. Anderson(Univ. of Washington), S. Shenker(UCB/CSI), I. Stoica(UCB)

EtherFuse:An Ethernet Watchdog

K. Elmeleegy, A. Cox, T. Ng(Rice)

Outrageous Opinions Session	16:45 - 17:45
------------------------------------	----------------------

Pre-banquet Cocktails	19:00 - 19:30
------------------------------	----------------------

Banquet	19:30 - 21:30
----------------	----------------------

August 30 (Thu)

Session 8:Attack Protection	9:00 - 10:15
------------------------------------	---------------------

A Study of Prefix Hijacking and Interception in the Internet

H. Ballani, P. Francis, X. Zhang(Cornell)

A Light-Weight Distributed Scheme for Detecting IP Prefix Hijacks in Realtime

C. Zheng(Cornell), L. Ji, D. Pei, J. Wang(AT&T Labs), P. Francis(Cornell)

Portcullis:Protecting Connection Setup from Denial-of-Capability Attacks

B. Parno, D. Wendlandt, E. Shi, A. Perrig, B. Maggs(CMU), Y. Hu(UIUC)

Coffee Break	10:15 - 10:45
---------------------	----------------------

Session 9:Network Characteristics	10:45 - 12:00
--	----------------------

How Dynamic are IP Addresses?

Y. Xie, F. Yu, K. Achan, E. Gillum, M. Goldszmidt(MSR), T. Wobber(Microsoft)

Observing the Evolution of Internet AS Topology

R. Oliveira(UCLA), B. Zhang(Univ. of Arizona), L. Zhang(UCLA)

Orbis:Generating Realistic, Annotated Internet Topologies

P. Mahadevan, C. Hubble(UCSD), D. Krioukov, B. Huffaker(CAIDA), A. Vahdat(UCSD)

Lunch	12:00 - 13:20
--------------	----------------------

Session 10:Resource Allocation	13:20 - 15:00
---------------------------------------	----------------------

Cloud Control with Distributed Rate Limiting

B. Raghavan, K. Vishwanath, S. Ramabhadran, K. Yocum, A. Snoeren(UCSD)

Emulating AQM from End Hosts

S. Bhandarkar, A. Reddy, Y. Zhang, D. Loguinov(Texas A&M Univ.)

Structured Streams:a New Transport Abstraction

B. Ford(MIT)

DTN Routing as a Resource Allocation Problem

A. Balasubramanian, B. Levine, A. Venkataramani(Univ. of Massachusetts, Amherst)

Coffee Break	15:00 - 15:30
---------------------	----------------------

Session 11:Wireless	15:30 - 16:45
----------------------------	----------------------

Understanding and Mitigating the Impact of RF Interference on 802.11 Networks

R. Gummadi(USC), D. Wetherall(UW/Intel Research), B. Greenstein(Intel Research), S. Seshan(CMU)

Embracing Wireless Interference:Analog Network Coding

S. Katti, S. Gollakota, D. Katabi(MIT)

PPR:Partial Packet Recovery for Wireless Networks

K. Jamieson, H. Balakrishnan(MIT)

Closing Remarks	16:45 - 17:00
------------------------	----------------------

August 31 (Fri)

Workshops (INM, P2P-TV, IPv6)	9:00 - 17:00
--------------------------------------	---------------------

Registration

Online registration through www.sigcomm.org/sigcomm2007/

EARLY REGISTRATION

On or **Before** 17:00 July 18, 2007 / Japan Standard Time. (GMT+9)

	Conference	Workshop
ACM/SIGCOMM Member	JPY 63,000	JPY 18,000
Non-Member	JPY 78,000	JPY 21,500
Student	JPY 42,000	JPY 18,000

LATE/ON-SITE REGISTRATION

On or **After** 17:01 July 18, 2007 / Japan Standard Time. (GMT+9)

	Conference	Workshop
ACM/SIGCOMM Member	JPY 72,000	JPY 24,000
Non-Member	JPY 87,000	JPY 28,000
Student	JPY 51,000	JPY 24,000

SIGCOMM2007 Committee

General Chair Jun Murai Keio University	Poster Chair T.S. Eugene Ng Rice University
Vice General Chair (Also Treasurer/Web Chair) Kenjiro Cho IU	Travel Grant Chairs Katherine Guo Bell Labs Guillaume Urvoy-Keller Eurecom
PC Chairs Nina Taft Intel Research Anja Feldmann Deutsche Telekom Labs/TU-Berlin	Sue Moon KAIIST Klaus Wehrle RWTH Aachen
Workshop/Tutorial Chairs Paul Francis Cornell University Hiroshi Esaki Univ. of Tokyo	Outrageous Opinions Chair Christophe Diot Thomson Research
Publications Chair Craig Partridge BBN	2007 Coordinator Shigeya Suzuki USC/ISI
Publicity Chair Jelena Mirkovic University of Delaware	Conference Coordinators Joe Touch USC/ISI Jaudelice C. de Oliveira Drexel University
Local Arrangements Chair Ryuji Wakikawa Keio University	

Supporters



ACM SIGCOMM 2007 Data Communications Festival



Advance Program
www.sigcomm.org/sigcomm2007/

SIGCOMM

AUGUST 27-31 2007 KYOTO JAPAN