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4th ACM International Conference on emerging Networking EXperiments and Technologies

9 - 12 December 2008

Madrid, Spain

ACM CoNEXT 2008 is a major forum for future networking technologies. Previous CoNEXT Conferences have successfully encouraged original, long-term studies and contributed to the integration of networking research on an international level. The 4th ACM International Conference on emerging Networking EXperiments and Technologies (ACM CoNEXT 2008), will be hosted by the University Carlos III of Madrid. The conference will be a major forum for presentations and discussions of novel networking technologies, which are set to shape the future of Internetworking. We strive to open informative and stimulating debates between distinct international research communities. The conference is single-track and will feature a high-quality technical program, with significant opportunities for individual and small-group technical and social interactions. The main conference (go to the next page to read the **Technical Program**) will also be preceded by **three one-day workshops**:

CoNEXT Student Workshop's Technical Program: http://www.co-next.net/studentworkshop_technicalprogram.html
ReArch'08 Workshop's Technical Program: http://www.co-next.net/rearch_technicalprogram.html
ROADS'08 Workshop's Technical Program: http://www.co-next.net/roads_technicalprogram.html

Conference Chairs
Arturo Azcorra, IMDEA Networks and University Carlos III of Madrid, *Spain*
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Tuesday 9th Dec (Parallel Events)

- CoNEXT Student Workshop
- ReArch'08 Workshop
- ROADS'08 Workshop

Wednesday 10th Dec

Keynote Presentation (2008 ACM SIGCOMM Rising Star Award)

• 802.11 Networks: From the Urban, to the Enterprise, to What? *Konstantina Papagiannaki*

Internet Measurement I

• Is There Life in Second Life? *Matteo Varvello; Fabio Picconi; Christophe Diot; Ernst Biersack*
• Troubleshooting Chronic Conditions in Large IP Networks. *Ajay Mahimkar; Jennifer Yates; Yin Zhang; Aman Shaikh; Jia Wang; Zihui Ge; Cheng Ee*
• Packet Doppler: Network Monitoring using Packet Shift Detection. *Tongqing Qiu; Jian Ni; Hao Wang; Nan Hua; Y. Richard Yang; Jun Xu*
• Online Estimation of RF Interference. *Nabeel Ahmed; Usman Ismail; Srinivasan Keshav; Konstantina Papagiannaki*

Overlays and Economics

• MOSAIC: Unified Declarative Platform for Dynamic Overlay Composition. *Yun Mao; Boon Thau Loo; Zachary Ives; Jonathan Smith*
• EGOIST: Overlay Routing using Selfish Neighbor Selection. *Georgios Smaragdakis; Vassilis Lekakis; Nikolaos Laoutaris; Azer Bestavros; John Byers; Mema Roussopoulos*
• On Cooperative Settlement Between Content, Transit and Eyeball Internet Service Providers. *Richard Ma; Dah Ming Chiu; John C. S. Lui; Vishal Misra; Dan Rubenstein*

Routing: Instability, Scalability, and Resilience

• On the Scalability of BGP: the roles of topology growth and update rate-limiting. *Ahmed Elmokashfi; Amund Kvalbein; Constantine Dovrolis*
• Instability Free Routing: Beyond One Protocol Instance. *Franck Le; Geoffrey Xie; Hui Zhang*
• Balancing Performance, Robustness, and Flexibility in Routing Systems. *Kin-Wah Kwong; Roch Guerin; Shu Tao; Anees Shaikh*

Thursday 11th Dec

Internet Measurement II

• Internet Traffic Classification Demystified: Myths, Caveats, and the Best Practices. *Hyun-chul Kim; Kimberly Claffy; Marina Fomenkov; Dhiman Barman; Michalis Faloutsos; KiYoung Lee*
• Observing Slow Crustal Movement in Residential User Traffic. *Kenjiro Cho; Kensuke Fukuda; Hiroshi Esaki; Akira Kato*
• Capacity Estimation of ADSL links. *Daniele Croce; Taoufik En-Najjary; Guillaume Urvoy-Keller; Ernst Biersack*

New Architectures and Protocols

• A priority layered approach to transport for high bandwidth delay product networks. *Vidhyashankar Venkataraman; Paul Francis; M. Kodialam; T. V. Lakshman*
• DaVinci: Dynamically Adaptive Virtual Networks for a Customized Internet. *Jiayue He; Rui Zhang-Shen; Ying Li; Cheng-yen Lee; Jennifer Rexford; Mung Chiang*
• Implementation of End-to-End Abstractions in a Network Service Architecture. *Shashank Shanbhag; Tilman Wolf*

P2P

• Peer-Assisted Content Distribution with Prices. *Christina Aperjis; Michael Freedman; Ramesh Johari*
• Uplink Allocation Beyond Choke/Unchoke: or Why Divide Does Not Always Conquer Best. *Nikolaos Laoutaris; Damiano Carra; Pietro Michiardi*
• Maintaining Replicas in Unstructured P2P Systems. *Christof Leng; Wesley Terpstra; Bettina Kemme; Wilhelm Stannat; Alejandro Buchmann*

Virtual Routers and VLANs

• Towards high performance virtual routers on commodity hardware. *Norbert Egi; Adam Greenhalgh; Mark Handley; Mickael Hoerdt; Felipe Huici; Laurent Mathy*
• Efficient IP-Address Lookup with a Shared Forwarding Table for Multiple Virtual Routers. *Jing Fu; Jennifer Rexford*
• Towards Systematic Design of Enterprise Networks. *Yu-Wei Sung; Sanjay Rao; Geoffrey Xie; David Maltz*

Panel

What is Network Science? *Christophe Diot; Roch Guérin; Fabrizio Sestini; Ty Znati*
Moderator: Keith W.Ross

Friday 12th Dec

Security

• ALPHA: An Adaptive and Lightweight Protocol for Hop-by-hop Authentication. *Tobias Heer; Stefan Götz; Oscar Garcia Morchon; Klaus Wehrl*
• Packet Dropping Adversary Identification for Data Plane Security. *Xin Zhang; Abhishek Jain; Adrian Perrig*
• Extending Finite Automata to Efficiently Match Perl-Compatible Regular Expressions. *Michela Becchi; Patrick Crowley*

Wireless and Sensors

• Quality of Monitoring of Stochastic Events by Periodic and Proportional-Share Scheduling of Sensor Coverage. *David K. Y. Yau; Nung Kwan Yip; Chris Yu Tak Ma; Nageswara Rao; Mallikarjun Shankar*
• Improving the Performance of Multi-hop Wireless Networks using Frame Aggregation and Broadcast for TCP ACKs. *Scott Nettles; Wonsoo Kim; Hyrum Wright*
• TDM MAC Protocol Design and Implementation for Wireless Mesh Networks. *Dimitrios Koutsonikolas; Theodoros Salonidis; Henrik Lundgren; Pascal LeGuyadec; Y. Charlie Hu; Irfan Sheriff*
• Opportunistic Use of Client Repeaters to Improve Performance of WLANs. *Victor Bahl; Ranveer Chandra; Patrick P. C. Lee; Vishal Misra; Jitendra Padhye; Dan Rubenstein; Yan Yu*

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