Boston, MA

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**2ND SYMPOSIUM ON**
**NETWORKED SYSTEMS**
**DESIGN & IMPLEMENTATION**
Sponsored by USENIX in cooperation
with ACM SIGCOMM and ACM SIGOPS

**'05**

**May** 2-4, 2005

Join us in Boston, MA, May 2–4, 2005, for the latest in networked systems research. The NSDI symposium focuses on the design principles of large-scale networks and distributed systems. Join researchers from across the networking and systems community—including computer networking, distributed systems, and operating systems—in fostering cross-disciplinary approaches and addressing shared research challenges.

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# HOTEL & REGISTRATION

**Hotel Information**

*Hotel Reservation Discount Deadline: April 18, 2005*

Boston Park Plaza Hotel & Towers
64 Arlington Street
Boston, MA 02116-3912
Telephone: 617.426.2000
Web site: http://www.bostonparkplaza.com
Rates: $159 single/double

All requests for reservations received after the deadline will be handled on a space-available basis.

**Technical Session Registration Fees**

*Registration Deadline: April 18, 2005*

Member: $675
Nonmember: $790
Full-time Student Member: $270
Full-time Student Nonmember: $310
The nonmember rates include a one-year USENIX membership.

After April 18, members and nonmembers (not students) add $150 to their technical sessions fee.

**Register Online:**
**http://www.usenix.org/nsdi05**
**Questions?**
**Telephone: 510-528-8649**
**Fax: 510-548-5738**
**Email: nsdi05_reg@usenix.org**

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**Register by April 18 and save!**     **http://www.usenix.org/nsdi05**

**8:45 a.m.–9:00 a.m.          Opening Remarks**

**9:00 a.m.–10:00 a.m.**

## KEYNOTE ADDRESS

Tom Leighton, *Massachusetts Institute of Technology/Akamai*

**10:30 a.m.–12:00 noon**

## INTERNET ROUTING

**Finding a Needle in a Haystack: Pinpointing Significant BGP Routing Changes in an IP Network**
Jian Wu and Zhuoqing Morley Mao, *University of Michigan;* Jennifer Rexford, *Princeton University;* Jia Wang, *AT&T Labs—Research*

**Design and Implementation of a Routing Control Platform**
Matthew Caesar, *University of California, Berkeley;* Donald Caldwell, *AT&T;* Nick Feamster, *Massachusetts Institute of Technology;* Jennifer Rexford, *Princeton University;* Aman Shaikh and Jacobus van der Merwe, *AT&T*

**Negotiation-based Routing Between Neighboring ISPs**
Ratul Mahajan, David Wetherall, and Thomas Anderson, *University of Washington*

**12:00 noon–1:30 p.m.          Lunch (on your own)**

**1:30 p.m.–3:00 p.m.**

## MODELS AND FAULTS

**Detecting BGP Configuration Faults with Static Analysis**
Nick Feamster and Hari Balakrishnan, *Massachusetts Institute of Technology*

**IP Fault Localization Via Risk Modeling**
Ramana Rao Kompella, *University of California, San Diego;* Jennifer Yates and Albert Greenberg, *AT&T Labs—Research;* Alex C. Snoeren, *University of California, San Diego*

**Performance Modeling and System Management for Multi-component Online Services**
Christopher Stewart and Kai Shen, *University of Rochester*

**3:30 p.m.–5:00 p.m.**

## OVERLAYS AND DHTS

**Debunking Some Myths About Structured and Unstructured Overlays**
Miguel Castro, Manuel Costa, and Antony Rowstron, *Microsoft Research Cambridge*

**Bandwidth-efficient Management of DHT Routing Tables**
Jinyang Li, Jeremy Stribling, Robert Morris, and M. Frans Kaashoek, *Massachusetts Institute of Technology*

**Improving Web Availability for Clients with MONET**
David G. Andersen, Hari Balakrishnan, Frans Kaashoek, and Rohit Rao, *Massachusetts Institute of Technology*

**5:00 p.m.–6:30 p.m.          Reception and Poster Session**

**9:00 a.m.–10:30 a.m.**

## STORAGE

**Shark: Scaling File Servers via Cooperative Caching**
Siddhartha Annapureddy, Michael J. Freedman, and David Mazieres, *New York University*

**Glacier: Highly Durable, Decentralized Storage Despite Massive Correlated Failures**
Andreas Haeberlen, Alan Mislove, and Peter Druschel, *Rice University*

# Register by April 18 and save!
# http://www.usenix.org/nsdi05

**10:30 a.m.–12:00 noon**

## BUILDING NETWORK SERVICES

**Quorum: Flexible Quality of Service for Internet Services**
Josep M. Blanquer, Antoni Batchelli, Klaus Schauser, and Rich Wolski, *University of California, Santa Barbara*

**Trickles: A Stateless Network Stack for Improved Scalability and Network-level Flexibility**
Alan Shieh, Andrew Myers, and Emin Gün Sirer, *Cornell University*

**Designing Extensible IP Router Software**
Orion Hodson, *Microsoft Research;* Eddie Kohler, *University of California, Los Angeles*

**12:00 noon–1:30 p.m.          Symposium Luncheon**

**1:30 p.m.–3:00 p.m.**

## WIRELESS

**Using Emulation to Understand and Improve Wireless Networks and Applications**
Glenn Judd and Peter Steenkiste, *Carnegie Mellon University*

**Geographic Routing Made Practical**
Young Jin Kim and Ramesh Govindan, *University of Southern California;* Brad Karp, *Intel Research/Carnegie Mellon University;* Scott Shenker, *University of California, Berkeley/ICSI*

**Sustaining Cooperation in Multi-hop Wireless Networks**
Ratul Mahajan, Maya Rodrig, David Wetherall, and John Zahorjan, *University of Washington*

**3:30 p.m.–5:00 p.m.**

## SYSTEM MANAGEMENT AND CONFIGURATION

**ACMS: Akamai Configuration Management System**
Andy Berkheimer, *Akamai Technologies;* Alex Sherman, *Columbia University and Akamai;* Phil Lisiecki, *Akamai Technologies;* Joel Wein, *Polytechnic University and Akamai Technologies*

**The Collective: A Cache-Based System Management Architecture**
Ramesh Chandra, Nickolai Zeldovich, Constantine Sapuntzakis, and Monica S. Lam, *Stanford University*

**Live Migration of Virtual Machines**
Christopher Clark, Keir Fraser, and Steven Hand, *University of Cambridge;* Jacob Gorm Hansen and Eric Jul, *University of Copenhagen;* Christian Limpach, Ian Pratt, and Andrew Warfield, *University of Cambridge*

**9:00 a.m.–10:30 a.m.**

## SECURITY

**Botz-4-Sale: Surviving Organized DDoS Attacks That Mimic Flash Crowds**
Srikanth Kandula and Dina Katabi, *Massachusetts Institute of Technology;* Matthias Jacob, *Princeton University;* Arthur Berger, *Massachusetts Institute of Technology/Akamai*

**Cashmere: Resilient Anonymous Routing**
Li Zhuang and Feng Zhou, *University of California, Berkeley;* Ben Y. Zhao, *University of California, Santa Barbara;* Antony Rowstron, *Microsoft Research*

**10:30 a.m.–12:00 noon**

## SENSOR NETWORKS

**Decentralized, Adaptive Resource Allocation for Sensor Networks**
Geoff Mainland, David C. Parkes, and Matt Welsh, *Harvard University*

**Beacon Vector Routing: Scalable Point-to-Point Routing in Wireless Sensornets**
Rodrigo Fonseca, *University of California, Berkeley;* Sylvia Ratnasamy, *Intel Research, Berkeley;* Jerry Zhao, *International Computer Science Institute;* Cheng Tien Ee and David Culler, *University of California, Berkeley;* Scott Shenker, *University of California, Berkeley and International Computer Science Institute;* Ion Stoica, *University of California, Berkeley*

**Active Sensor Networks**
Philip Levis, *University of California, Berkeley;* David Gay, *Intel Research Berkeley;* David Culler, *University of California, Berkeley*