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The 14th ACM International Workshop on Network and Operating Systems Support for Digital Audio and Video

Conference Program

LIVE INTERNET BROADCAST

The technical sessions of NOSSDAV 2004 will be broadcast live over the Internet using End System Multicast (ESM) developed at Carnegie Mellon University. Please [click here](#) and follow the watch link to tune in.

Day	AM/PM	Agenda
Wed. June 16th	7:00-9:00 PM	Reception Reception in Kinsale Brewing Company
	9:00-9:15 AM	Welcome Remarks Venkat Padmanabhan & Cormac Sreenan NOSSDAV 2004 Co-Chairs
	9:15-10:30 AM	Keynote Address Beyond Content Delivery: Applications to the Edge Bill Weihl, CTO Akamai
	10:30-11:00 AM	Break
		Streaming Session Chair: Liam Murphy, University College Dublin Scalable Resilient Media Streaming Suman Banerjee (University of Wisconsin-Madison), Seungjoon Lee (University of Maryland at College Park), Ryan Braud (University of Maryland), Samrat Bhattacharjee (University of Maryland at College Park), Aravind Srinivasan (University of Maryland)

1st Day Thur. June 17th	11:00 AM- 12:30 PM	<p><i>Considering Altruism in Peer-to-Peer Internet Streaming Broadcast</i> Yang-hua Chu (Carnegie Mellon University), Hui Zhang (Carnegie Mellon University)</p> <p><i>An Adaptive Multiple Retransmission Technique for Continuous Media Streams</i> Rishi Sinha (University of Southern California), Christos Papadopoulos (University of Southern California)</p> <p><i>Comparison of Delivery Architectures for Immersive Audio in Crowded Networked Games</i> Paul Boustead (Telecommunications and Information Technology Research Institute, University of Wollongong), Farzad Safaei (Telecommunications and Information Technology Research Institute, University of Wollongong)</p>
	12:30-2:00 PM	Lunch
	2:00-3:50 PM	<p>Overlay Networking</p> <p>Session Chair: Dan Rubenstein, Columbia University</p> <p><i>Managing a portfolio of overlay paths</i> Daria Antonova (Northeastern University), Arvind Krishnamurthy (Yale University), Zheng Ma (Yale University), Ravi Sundaram (Northeastern University)</p> <p><i>Passive Inference of Path Correlation</i> Lili Wang (University of Kentucky), James Griffioen (University of Kentucky), Ken Calvert (University of Kentucky), Sherlia Yunxi Shi (University of Kentucky)</p> <p><i>A Framework for Architecting Peer-to-Peer Receiver-driven Overlays</i> Reza Rejaie (University of Oregon), Shad Stafford (University of Oregon)</p> <p><i>Efficient and Flexible Parallel Retrieval using Priority Encoded Transmission</i> Ramaprabhu Janakiraman (Washington University in St. Louis),</p>

		<p>Lihao Xu (Washington University in St. Louis)</p> <p>Connectivity Restrictions in Overlay Multicast Aditya Ganjam (Carnegie Mellon University), Hui Zhang (Carnegie Mellon University)</p>
	3:50-4:20 PM	Break
	4:20-5:30 PM	<p>Wireless and Mobility</p> <p>Session Chair: Dirk Pesch, Cork Institute of Technology</p> <p>Client-Centered Energy Savings for Concurrent HTTP Connections Haijin Yan (University of Georgia), Rupa Krishnan (University of Georgia), Scott Watterson (University of Georgia), David Lowenthal (University of Georgia)</p> <p>Energy-aware Video Streaming with QoS Control for Portable Computing Devices Morihiko Tamai (Nara Institute of Science and Technology), Tao Sun (Nara Institute of Science and Technology), Keiichi Yasumoto (Nara Institute of Science and Technology), Naoki Shibata (Shiga University), Minoru Ito (Nara Institute of Science and Technology)</p> <p>A Time Series-based Approach for Power Management in Mobile Processors and Disks Xiaotao Liu (University of Massachusetts, Amherst), Prashant Shenoy (University of Massachusetts at Amherst), Weibo Gong (University of Massachusetts at Amherst)</p>
	7:00-11:00 PM	Workshop Banquet
		<p>Congestion Control and Scheduling</p> <p>Session Chair: Venkat Padmanabhan, Microsoft Research</p>

<p>9:00-10:30 AM</p>	<p>Media-Friendliness of a Slowly-Responsive Congestion Control Protocol Zhiheng Wang (Univ. of Michigan, Ann Arbor), Sujata Banerjee (HP Laboratories), Sugih Jamin (University of Michigan)</p> <p>Oscillations and Buffer Overflows in Video Streaming under NonNegligible Queuing Delay Yueping Zhang (Texas A&M University), Dmitri Loguinov (Texas A&M University)</p> <p>Measurements of the Congestion Responsiveness of Windows Streaming Media James Nichols (WPI), Mark Claypool (Worcester Polytechnic Institute), Robert Kinicki (Worcester Polytechnic Institute), Mingzhe Li (WPI)</p> <p>Reduced State Fair Queuing for Edge and Core Routers Ramana Rao Kompella (University of California, San Diego), George Varghese (University of California at San Diego)</p>
<p>10:30-11:00 AM</p>	<p>Break</p>
<p>11:00 AM-12:30 PM</p>	<p>Panel</p> <p>Panel Title: Wireless Multimedia: Hype and Reality Moderator: Hui Zhang, Carnegie Mellon University</p> <p>Panelists: Victor Bahl, Microsoft Research Gisli Hjalmtysson, Reykjavik University Sugih Jamin, University of Michigan Geoffrey Xie, Naval Postgraduate School</p>
<p>12:30-2:00 PM</p>	<p>Lunch</p>
	<p>Systems</p> <p>Session Chair: Kevin Jeffay, University of North Carolina</p> <p>Desktop Scheduling: How Can We Know What the User Wants? Yoav Etsion (The Hebrew University),</p>

<p>2nd Day Fri. June 18th</p>	<p>2:00-3:30 PM</p>	<p>Dan Tsafir (The Hebrew University), Dror G. Feitelson (The Hebrew University)</p> <p><i>AMPS: A Flexible, Scalable Proxy Testbed for Implementing Streaming Services</i> Xiaolan Zhang (University of Massachusetts, Amherst), Michael Bradshaw (University of Massachusetts), Yang Guo (The MathWorks), Bing Wang (University of Massachusetts, Amherst), James F. Kurose (University of Massachusetts at Amherst), Prashant Shenoy (University of Massachusetts at Amherst)</p> <p><i>A Fully Automated Fault-tolerant System for Distributed Video Processing and Off-site Replication</i> George Kola (University of Wisconsin Madison), Tevfik Kosar (University of Wisconsin Madison), Miron Livny (University of Wisconsin-Madison)</p> <p><i>Distributed Server Replication in Large Scale Networks</i> Bong-jun Ko (Columbia University), Dan Rubenstein (Columbia University)</p>
	<p>3:30-4:00 PM</p>	<p>Break</p>
	<p>4:00-5:30 PM</p>	<p>Games</p> <p>Session Chair: Prashant Shenoy, University of Massachusetts at Amherst</p> <p><i>Low Latency and Cheat-Proof Event Ordering for Peer-to-Peer Games</i> Chris GauthierDickey (University of Oregon), Daniel Zappala (University of Oregon), Virginia Lo (University of Oregon), James Marr (University of Oregon)</p> <p><i>Analysis of State Exposure Control to Prevent Cheating in Online Games</i> Kang Li (University of Georgia), Shanshan Ding (University of Georgia), Doug McCreary (University of Georgia)</p>

		<p><i>The Effects of Latency on Online Madden NFL Football</i> James Nichols (WPI), Mark Claypool (Worcester Polytechnic Institute)</p> <p><i>Adaptive Server Selection for Large-scale Interactive Online Games</i> Lee, Kang-won (IBM), Bong-jun Ko (Columbia University), Seraphin Calo (IBM T J Watson Research Center)</p>
	<p>5:30-5:40 PM</p>	<p>Concluding Remarks</p>