

MMNS 2001 Technical Program

TUTORIAL DAY: Monday, October 29, 2001

09:30 – 13:00 TUTORIAL SESSION 1 & 2

14:00 – 17:30 TUTORIAL SESSION 3 & 4

18:00 – 20:00 OPENING RECEPTION at Harold Washington Library

DAY 1: Tuesday, October 30, 2001

08:00 – 08:30 REGISTRATION

08:30 – 09:00 CONFERENCE OPENING

09:00 – 10:00 KEYNOTE SPEECH: MANAGING THE GRID
David Hutchison, *Lancaster University, UK*

10:00 – 10:30 COFFEE BREAK

10:30 – 12:00 SESSION 1: MANAGEMENT OF MULTIMEDIA TRAFFIC STREAMING I
Chair: David Hutchison, *Lancaster University, UK*

- **A Hysteresis Based Approach for Quality, Frame Rate, and Buffer Management for Video Streaming using TCP**
Nagasuresh Seelam, Pankaj Sethi, Wu-chi Feng, *Ohio State University, USA*
- **MPEG-4 Video Transfer with TCP-Friendly Rate Control**
Naoki Wakamiya, Masaki Miyabayashi, Masayuki Murata, Hideo Miyahara, *Osaka University, Japan*
- **Enhancing Quality of MPEG Video through Partially Reliable Transport Service in Interactive Application**
Vincent Lecuire, Francis Lepage, Khalil Kammoun, *Centre de Recherche en Automatique de Nancy, France*

12:00 – 13:30 LUNCH BREAK

13:30 – 15:00 PANEL SESSION: FUTURE OF INTERNET QOS
Chair: Masum Hasan, *Cisco Systems, USA*

Panelists:
Guy Pujolle, *University of Pierre & Marie Curie, France*
David Hutchison, *Lancaster University, UK*
Lundy Lewis, *APRISMA, USA*
Michael Borella, *3Com, USA*

15:00 – 15:10 COFFEE BREAK

15:10 – 15:30 POSTER SESSION I
Chair: Anthony Chung, *DePaul University, USA*

- **A Novel Content-based Video Streaming Algorithm for Fine Granular Scalable (FGS) Coding**
Li Zhao, Qi Wang, Yuwen He, Shiqiang Yang, Yuzhuo Zhong, *Singhua University, China*
- **Topological Synthesis of Mobile Backbone Networks for Managing Ad Hoc Wireless Networks**
Izhak Rubin, Patrick Vincent, *University of California, Los Angeles, USA*
- **QoS Monitoring System on IP Networks**
Marcelo Borges Ribeiro, Lisandro Zambenedetti Granville, Maria Janilce Bosquirol Almeida, Liane Margarida Rockenbach Tarouco, *UFRGS, Brazil*

15:30 – 16:45 SESSION 2: RESOURCE MANAGEMENT IN WIRELESS MULTIMEDIA
Chair: Allen Marshall, *Queen's Univeersity, UK*

- **IP Radio Resource Control System**
John Vicente, *Intel Corporation, USA*, Andrew T. Campbell, *Columbia University, USA*
- **Is It Worth Involving Several Cooperating Agents for Multimedia User's Admission in Cellular Networks?**
Youssef Iraqi, Raouf Boutaba, *University of Waterloo, Canada*
- **Analysis of Random Access Protocol under Bursty Traffic**
Jian-Bo Gao, Izhak Rubin, *University of California, Los Angeles, USA*

17:15 – 19:30 MMNS2001 SOCIAL EVENTS: Van Gogh exhibit at the Art Institute of Chicago / Tour in Navy Pier

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DAY 2: Wednesday, October 31, 2001

08:30 – 09:30	INVITED TALK: MANAGING DISTRIBUTED SYSTEMS: APPROACHES TO PROBLEM DETERMINATION Gautam Kar, <i>IBM Research, USA</i>
09:30 – 10:00	COFFEE BREAK
10:00 – 12:00	SESSION 3: MANAGEMENT OF MULTIMEDIA TRAFFIC STREAMING II Chair: Masum Hasan, <i>Cisco Systems, USA</i> ▪ A Practical Model for VBR Video Traffic with Applications Tamas Borsos, <i>Budapest University of Technology and Economics, Hungary</i> ▪ A Transmission Scheme for Streaming Variable Bit Rate Video over Internet Sunghoon Son, <i>Electronics and Telecommunications Research Institute, Korea</i> ▪ Delivering MPEG-4 Multimedia Content over Next Generation Internet Toufik Ahmed, Guillaume Buridant, Ahmed Mehaoua, <i>University of Versailles, France</i> ▪ Video Skimming and Summarization Based on Principal Component Analysis Dan Lelescu, Dan Schonfeld, <i>University of Illinois at Chicago, USA</i>
12:00 – 13:30	LUNCH BREAK
13:30 – 15:00	PANEL SESSION: INTERNET WIRELESS MULTIMEDIA Chair: Raouf Boutaba, <i>University of Waterloo, Canada</i> Panelists: Andrew Campbell, <i>Columbia University, USA</i> Irfan Ali, <i>Motorola, USA</i> Allen Marshall, <i>Queen's University, UK</i>
15:00 – 15:10	COFFEE BREAK
15:10 – 15:30	POSTER SESSION II Chair: Anthony Chung, <i>DePaul University, USA</i> ▪ Queue Length based Fair Queuing in Core-Stateless Networks Mingyu Zhai, Guanqun Gu, Yuan Yuan, <i>Southeast University, China</i> ▪ Study of TCP and UDP flows in a Differentiated Services Network using Two Markers System Sung-Hyuck Lee, Seung-Joon Seok, Seung-Jin Lee, Chul-Hee Kang, <i>Korea University, Korea</i> ▪ Equation-based Dynamic Shaping of Self-Similar Traffic at Optical Access Node Halima Elbiaze, Tijani Chahed, Gerard Hebuterne, Tulin Atmaca, <i>Institute National des Telecommunications, France</i>
15:30 – 17:00	SESSION 4: QOS MANAGEMENT ON THE INTERNET Chair: Kevin Almeroth, <i>University of California, Santa Barbara, USA</i> ▪ Resource Management to Support Application-Specific Quality of Service Gary Molenkamp, Michael Katchabaw, Hanan Lutfiyya, Michael Bauer, <i>University of Western Ontario, Canada</i> ▪ Implementation of a Bandwidth Broker for Dynamic End-to-End Capacity Reservation over Multiple Diffserv Domains Ibrahim Khalil, Torsten Braun, <i>PONTE Communications, USA</i> ▪ The Impact of Confidentiality on Quality of Service in Heterogeneous Voice over IP Networks Jonathan M. Reason, David G. Messerschmitt, <i>University of California, Berkeley, USA</i>
18:30 – 21:30	BANQUET

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DAY 3: Thursday, November 1, 2001

08:30 – 09:30	INVITED TALK: NETWORKS ON-DEMAND Andrew T. Campbell, <i>Columbia University, USA</i>
09:30 – 10:00	COFFEE BREAK
10:00 – 12:00	SESSION 5: FAULT MANAGEMENT ON THE INTERNET Chair: Lundy Lewis, <i>APRISMA, USA</i> ▪ A Framework for Supporting Intelligent Fault and Performance Management for Communication Networks Hongjun Li, John S. Baras, <i>University of Maryland, USA</i> ▪ Providing Scalable Many-to-One Feedback in Multicast Reachability Monitoring Systems Kamil Sarac, Kevin C. Almeroth, <i>University of California Santa Barbara, USA</i> ▪ Architecture of Generalized Network Service Anomaly and Fault Thresholds and Detection Zheng Zhang, Constantine Manikopoulos, Jay Jorgenson, <i>New Jersey Institute of Technology, USA</i> ▪ A Framework for Event Correlation in Communication Systems Mouayad Albaghdadi, Bruce Briley, Martha Evens, Rafid Sukkar, Mohammed Petiwala, Mark Hamlen, <i>Motorola, USA</i>
12:00 – 13:30	LUNCH BREAK
13:30 – 15:00	SESSION 6: AGENTS FOR MULTIMEDIA MANAGEMENT Chair: Nazim Agoulmine, <i>University of Evry, France</i> ▪ Policy-based Management for Multimedia Collaborative Services H. Harroud, M. Lakhdissi, A. Karmouch, C. Grossner, <i>University of Ottawa, Canada</i> ▪ Agent-Enhanced Dynamic Service Level Agreement in Future David Chieng, Alan Marshall, <i>The Queen's University of Belfast, UK</i>, Ivan Ho, Gerard Parr, <i>University of Ulster at Coleraine, U.K.</i> ▪ WEBARM - Mobile Agent Based Web Application Response Measurement: Software Implementations and Analysis Joseph V. Elarde, Gregory B. Brewster, <i>DePaul University, USA</i>
15:00 – 15:30	COFFEE BREAK
15:30 – 17:00	SESSION 7: MULTIMEDIA SERVICE MANAGEMENT Chair: Greg Brewster, <i>DePaul University, USA</i> ▪ The Dynamics of Price, Revenue and System Utilization Srinivasan Jagannathan, Kevin Almeroth, <i>University of California Santa Barbara, USA</i> ▪ Developing Pattern-Based Management Programs Koon-Seng Lim, Rolf Stadler, <i>Columbia University, USA</i> ▪ Supermedia in Internet-Based Telerobotic Operations Imad Elhajj, Ning Xi, Wai Keung Fung, Yun hui Liu, Tomoyuki Kaga, Toshio Fukuda, <i>Michigan State University, USA</i>
17:00 – 17:10	CONFERENCE CLOSURE

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