

NOSSDAV 2009

The 19th International Workshop on Network and Operating Systems Support for Digital Audio and Video

Williamsburg, Virginia. June 3-5, 2009

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03 June 2009

1800 **Registration Opens**

1900 **Reception**

04 June 2009

0800 **Registration and Breakfast**

0830 - 0845 **Welcome Address**

0845 - 1000 **Keynote Session**

- **Experiences Building Telepresence Systems**
Keynote Speaker: Prof. Henry Fuchs

Federico Gil Professor of Computer Science

Adjunct Professor of Biomedical Engineering

University of North Carolina at Chapel-Hill

1000 - 1030 **Coffee Break**

1030 - 1200 **Session 1: New Applications and Services**

Discussion Lead: Wei Tsang Ooi (National University of Singapore)

Scribe: Amir Hassan Rasti Ekbatani (University of Oregon)

- **Dynamic Overlay Multicast in Multi-Stream/Multi-Site Collaborative Systems** **3D**

Wanmin Wu (University of Illinois at Urbana-Champaign)

Zhenyu Yang (Florida International University)

Klara Nahrstedt (University of Illinois at Urbana-Champaign)

- **Web 2.0 Traffic Measurement: Analysis on Online Map Applications**

Song Lin (Tsinghua University)

Zhiguo Gao (IBM China Research Laboratory)

Ke Xu (Tsinghua University)

- **Peer-Assisted Online Storage and Distribution: Modeling and Server Strategies**

Ye Sun (Hong Kong University of Science & Technology)

Fangming Liu (Hong Kong University of Science & Technology)

Bo Li (Hong Kong University of Science & Technology)

Baochun Li (University of Toronto)

1200 - 1330 **Lunch**

1330 - 1500 **Session 2: P2P Streaming I**

Discussion Lead: Ketan Mayer-Patel (University of North Carolina at Chapel Hill)

Scribe: Remo Meier (ETH Zurich)

- **InstantLeap: Fast Neighbor Discovery in P2P VoD Streaming**

Xuanjia Qiu (Sun Yat-Sen University)

Chuan Wu (The University of Hong Kong)

Xiaola Lin (Sun Yat-Sen University)
Francis C. M. Lau (The University of Hong Kong)

- **Overlay Monitoring and Repair in Swarm-based Peer-to-Peer Streaming**

Nazanin Magharei (University of Oregon)
Reza Rejaie (University of Oregon)

- **Adaptive Overlay Topology for Mesh-Based P2P-TV Systems**

Richard John Lobb (University of Canterbury)
Ana Paula Couto da Silva (Federal University of Juiz de Fora)
Emilio Leonardi (Politecnico di Torino)
Marco Mellia (Politecnico di Torino)
Michela Meo (Politecnico di Torino)

1500 - 1530 **Coffee Break**

1530 - 1730 **Session 3: OS and End Systems**

Discussion Lead: Kevin Almeroth (UC Santa Barbara)

Scribe: Ishan Vaishnavi (Centrum voor Wiskunde en Informatica)

- **Random Network Coding on the iPhone: Fact or Fiction?**

Hassan Shojania (University of Toronto)
Baochun Li (University of Toronto)

- **SLIPstream: Scalable Low-latency Interactive Perception on Streaming Data**

Padmanabhan S. Pillai (Intel Research Pittsburgh)
Lily B. Mummert (Intel Research Pittsburgh)

*Steven W. Schlosser (Intel Research
Pittsburgh)*

*Rahul Sukthankar (Intel Research
Pittsburgh)*

*Casey J. Helfrich (Intel Research
Pittsburgh)*

- **Server-Efficient High-Definition
Media Dissemination**

Philip W. Frey (IBM Research GmbH)

Andreas Hasler (IBM Research GmbH)

Bernard Metzler (IBM Research GmbH)

Gustavo Alonso (ETH Zurich)

- **Power Efficient Real-Time Disk
Scheduling**

Damien Le Moal (Hitachi Ltd.)

*Donald Molaro (Hitachi Global Storage
Technologies, San Jose Research Center)*

*Jorge Campello (Hitachi Global Storage
Technologies, San Jose Research Center)*

1900

Banquet

05 June 2009

0800

Registration and Breakfast

0830 - 1000

Session 4: Virtual Environments and Games

*Discussion Lead: Kuan-Ta Chen (Academia
Sinica)*

*Scribe: Pengpeng Ni (Simula Research Lab and
University of Oslo)*

- **A Delaunay Triangulation
Architecture Supporting Churn and
User Mobility in MMVE-s**

*Mohsen Ghaffari (Sharif University of
Technology)*

Behnoosh Hariri (Sharif University of

Technology and University of Ottawa
Shervin Shirmohammadi (Sharif University
of Technology and University of Ottawa)

- **Probabilistic Event Resolution with the Pairwise Random Protocol**

John L. Miller (Microsoft Research and
University of Cambridge)

Jon Crowcroft (University of Cambridge)

- **Cross-Tree Adjustment for Spatialized Audio Streaming over Networked Virtual Environments**

Ke Liang (National University of Singapore)

Roger Zimmermann (National University of
Singapore)

1000 - 1030 **Coffee Break**

1030 - 1200 **Session 5: Security**

Discussion Lead: Klara Nahrstedt (UIUC)

Scribe: Liang Ke (National University of
Singapore)

- **End-to-End Secure Delivery of Scalable Video Streams**

Kianoosh Mokhtarian (Simon Fraser
University)

Mohamed Hefeeda (Simon Fraser
University)

- **Secure Multimedia Content Delivery with Multiparty Multilevel DRM Architecture**

Tony Thomas (Nanyang Technological
University)

Sabu Emmanuel (Nanyang Technological
University)

Amitabha Das (Nanyang Technological
University)

Mohan S. Kankanhalli (National University of Singapore)

- **Rapid Identification of Skype Traffic**

Philip A. Branch (Swinburne University of Technology)

Amiel Heyde (Swinburne University of Technology)

Grenville J. Armitage (Swinburne University of Technology)

1200 - 1330 **Lunch**

1330 - 1500 **Session 6: Understanding and Improving User Experience**

Discussion Lead: Mohamed Hafeeda (Simon Fraser University)

Scribe: Wei Cheng (National University of Singapore)

- **An Empirical Evaluation of VoIP Playout Buffer Dimensioning in Skype, Google Talk, and MSN Messenger**

Chen-Chi Wu (National Taiwan University)

Kuan-Ta Chen (Academia Sinica)

Chun-Ying Huang (National Taiwan Ocean University)

Chin-Laung Lei (National Taiwan University)

- **Fine-Grained Scalable Streaming from Course-Grained Video**

Pengpeng Ni (Simula Research Laboratory and University of Oslo)

Alexander Eichhorn (Simula Research Laboratory)

Carsten Griwodz (Simula Research Laboratory and University of Oslo)

Pål Halvorsen (Simula Research Laboratory and University of Oslo)

- **Estimate and Serve: Scheduling Soft Real-Time Packets for Delay Sensitive Media Applications on the Internet**

Ishan Vaishnavi (Centrum voor Wiskunde en Informatica)

Dick C. A. Bulterman (Centrum voor Wiskunde en Informatica)

1500 - 1530 **Coffee Break**

1530 - 1700 **Session 7: P2P Streaming II**

Discussion Lead: Dongyan Xu (Purdue University)

Scribe: Saurabh Ratti (University of Ottawa)

- **Zebroid: IPTV Data Mining to Support Peer-Assisted VoD Content Delivery**

Yih-Farn Robin Chen (AT&T Laboratories - Research)

Rittwik Jana (AT&T Laboratories - Research)

Daniel Stern (AT&T Laboratories - Research)

Bin Wei (AT&T Laboratories - Research)

Mike Yang (AT&T Laboratories - Research)

Hailong Sun (Beihang University)

- **Robust Live Media Streaming in Swarms**

Thomas Locher (ETH Zurich)

Remo Meier (ETH Zurich)

Roger Wattenhofer (ETH Zurich)

Stefan Schmid (TU Munich)

- **Providing Statistically Guaranteed Streaming Quality for Peer-to-Peer Live Streaming**

Miao Wang (University of Nebraska-Lincoln)

Lisong Xu (University of Nebraska-Lincoln)

*Byrav Ramamurthy (University of Nebraska-
Lincoln)*

1700 - 1715 **Concluding Remarks**

This website is mirrored at <http://www.nossdav.org/2009/> and <http://nemesys.comp.nus.edu.sg/nossdav09/>.
