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# Protocols for Multimedia Systems

6th International Conference, PROMS 2001 Enschede, The Netherlands, October 17-19, 2001 Proceedings



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Marten J. van Sinderen Lambert J.M. Nieuwenhuis University of Twente, Department of Computer Science Centre for Telematics and Information Technology (CTIT) P.O. Box 217, 7500 AE Enschede, The Netherlands E-mail: sinderen@ctit.utwente.nl bart@cs.utwente.nl

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#### Preface

This conference in Enschede, The Netherlands, is the sixth in a series of international conferences and workshops under the title Protocols for Multimedia Systems, abbreviated as PROMS. The first PROMS workshop took place in June 1994 in Berlin, Germany, followed by workshops in Salzburg, Austria (October 1995) and Madrid, Spain (October 1996). In 1997, PROMS formed a temporary alliance with Multimedia Networking, a conference previously held in Aizu, Japan, in 1995. This led to the international conference on Protocols for Multimedia Systems – Multimedia Networking, PROMS-MmNet, that took place in Santiago, Chile (November 1997). Since then PROMS has been announced as an international conference, although informal contacts and interactive sessions – as in a workshop – were retained as a desirable feature of PROMS. After a gap of three years, PROMS was organized in Cracow, Poland (October 2000), for the fifth time. We consider it a challenge to make this sixth edition of PROMS as successful as the previous events.

The goal of the PROMS series of conferences and workshops is to contribute to scientific, strategic, and practical cooperation between research institutes and industrial companies in the area of multimedia protocols. This is also the goal of PROMS 2001. The basic theme of this conference continues to be multimedia protocols, both at the network and application level, although the increasing interest in wireless, mobility, and quality-of-service as interrelated topics with relevance to multimedia are reflected in the current program.

This year, 43 research papers were submitted from academic and industrial institutions all over the world, which confirms the international character of work in this area. Every submitted paper was reviewed by at least three reviewers. Thanks to the first class reviews from our program committee members and additional reviewers, and with the help of the online conference tool ConfMan, we were able to select 18 high-quality papers for presentation at the conference. These papers are grouped as follows in sessions for the single track technical program: (1) QoS in the Internet, (2) Multimedia streaming, (3) Multimedia multicast, (4) Wireless networks and host mobility, (5) TCP/IP optimization, and (6) Service development and deployment. The technical program is complemented with two invited presentations: "From Mars to Your TV at Home - Selected Internet Developments" by Erik Huizer and "Which Way to the Wireless Internet ?" by Andrew Campbell.

Also part of this conference, but not reflected in these proceedings, is a tutorial program, scheduled before the technical program. We are pleased that we could attract Alan Parkes, Frank Eliassen, and Thomas Plagemann who were willing to share their overviews and insights on "Approaching Multimedia Content Description" (Parkes) and "Multimedia Middleware" (Eliassen/Plagemann).

We would like to thank the tutorial and invited speakers for their contribution to PROMS 2001. We are grateful for the efforts of the program committee members. With the help of additional reviewers, they managed to produce reviews on all submitted research papers while observing the tight deadlines that were imposed by the organizers. They also contributed to the paper selection process that resulted in the strong technical program of this conference. We appreciate the useful advice of the organizer of the previous conference, Zdzislaw Papir. We gratefully acknowledge the cooperation with ACM SIGCOMM and SIGMM, and the COM Chapter of IEEE

Benelux Section. We are also grateful for the financial support of our industrial sponsors, of the Faculty of Computer Science of the University of Twente, and of the Centre of Telematics and Information Technology of the University of Twente. Finally, we wish to thank the people from our local organizing committee, Marloes Castañeda, Annelies Klos, Giancarlo Guizzardi, and Christian Tzolov. We really appreciated your help!

July 2001

Marten van Sinderen Bart Nieuwenhuis

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