Panel 1. Multimedia Research: the Grand Challenges for the Next Decade

Panel Organizer and Moderator

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Panelists

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Dick Bulterman, CWI, Netherlands

Lawrence A. Rowe, University of California, Berkeley

Brian Smith, Cornell University

Theme of panel

Suppose you have been asked by your research funding council to write a case to support a significant amount of funding being put into a pot called "multimedia" over the next 5-10 years. How would you make your case?

What would you give as the major success stories in multimedia research over the last 10 years - what has made the most impact on the research and the business community?

What are the "must fund" areas for the next 5-10 years i.e where do we really need breakthroughs for "multimedia research" to have a major impact on future systems?

What research topics are being worked on now that you think do not warrant the investment? What are the safe-bets that should be funded because it is clear that they are going to deliver results in the not too distant future? What are the risky areas, where breakthroughs don't seem likely at the moment, but if research was successful then the impact would be enormous?

Finally, what is the justification for funding multimedia in the future- can it deliver on its promises, are there real systems beyond the hype?

Panelists

Philippe Agrain is Head of Sector "Software Technologies" in the European Commission Information Society Technologies R&D Programme. He was trained as a mathematician and theoretical scientis, and holds a Doctorat and the Habilitation à Diriger les Recherches from University of Paris 7. From 1972 to 1981, he worked in the software engineering research labs of various software companies. He was a research fellow at U.C.Berkeley in 1982. Since then, and before joining the European Commission in 1996, he headed research teams in the field of computer processing, indexing, retrieval and user interfaces for audiovisual media. He is the author of more than 60 technical and technology assessment papers.

Dick Bulterman is President and CTO of Oratrix Development BV, a company that develops the GRiNS authoring system for Web-based Multimedia. Prior to starting Oratrix, Dr. Bulterman was head of the Multimedia and Human-Computer Interaction group at CWI, the Dutch national research center for mathematics and computer science in Amsterdam. His research interests are: interfaces for structured multimedia and control over adaptive multimedia presentations. He was one of the prime architects of the W3C SMIL standard

Lawrence A. Rowe is Professor of Electrical Engineering and Computer Science at the University of California at Berkeley. He is also the Director of the Berkeley Multimedia Research Center. He is an ACM Fellow and is currently the chair of the ACM Special Interest Group on Multimedia. He has published over 90 papers on multimedia systems and applications, programming systems and database systems and his current research interests include Internet webcasting, distributed collaboration, and media processing

He received his Ph.D. from the University of California at Berkeley in 1994, where he co-authored the Berkeley MPEG player and developed some of the first techniques for compressed domain processing. Since then, his research has focused on building systems that efficiently process multimedia data. He has authored more than 20 conference and journal papers and was co-chair of the ACM Multimedia 98 program committee. He is currently on leave from Cornell, and is head of software at Netpliance, Inc (an Internet startup)

Brian Smith is an assistant professor of computer science at Cornell University and a fellow of the Alfred P. Sloan foundation.