

Rochester Section Hosts "The Compression Experience"

Compression of digital video and audio was the topic of a one-day tutorial conducted by the Rochester Section on Saturday, October 28, 1995. Six speakers addressed the audience of 86, each contributing his know-how and explaining the theory of video and audio compression as well as applications for compression technology.

"The Compression Experience" replaced the SMPTE Mini-Conference, the annual forum alternately held in Toronto, Montreal, Ottawa, and Rochester. Originally planned to be held on Stage A at Rochester's public broadcasting station, WXXI, a conflict moved the event to the 5th floor of a new WXXI addition.

Eric F. Pohl, NBC, Inc., opened the tutorial by defining compression as "an algorithmic elimination of redundancy." He was then followed by three speakers who focused on the theories of video and audio compression. Majid Rabbini, Eastman Kodak, presented "Image Compression and Fundamentals," in which he pointed out the need for compression and the JPEG standard. Rabbini ended his discussion with suggestions for compression research topics. In "Moving Image Compression," Ibrahim Sezan, Eastman Kodak, traced still image compression to motion image compression, covering MPEG-1 in detail and providing an overview of the MPEG-2 standard. He also touched on a possible MPEG-4 in the future. Mysore Raghuvier, Rochester Institute of Technology, presented "Audio Compression," outlining its principles with an emphasis on their relation to MPEG standards.

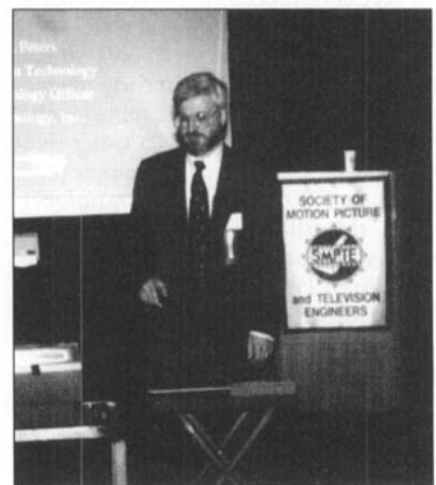
The next three speakers concentrated on various compression applications. Manfred Dworatzek, BTS - Broadcast Television Systems, presented "Data Compression for Professional Applications," which summarized lossless data compression where quality loss of professional data is not acceptable; the Media Pool disk server was offered as a possible solution. Nick DiLello, Sony



Majid Rabbini presents "Image Compression and Fundamentals."



Manfred Dworatzek came from Germany to address the audience at "The Compression Experience."



Eric C. Peters of Avid Technology was one of seven speakers.



John Cerquone, left, and Walt Snyder listen in on the presentations.



"The Compression Experience" boasted an attendance of 86.



Eric Pohl opened the tutorial and provided closing comments.



The concept of audio compression was examined by Mysore Raghuvver.



Attendees were treated to a buffet lunch.

Business and Professional Group, read a paper by Steven Wynn, Sony Electronics; "Impacts for New Technologies — Applications" took a systematic look at compression applications, emphasizing MPEG's 4:2:2 profile. In "Storage and Access of Compressed Digital Images," Eric C. Peters, Avid Technology, introduced the history of video compression in nonlinear editing and looked ahead to the future: transport systems between different boxes. Nick DiLello then presented his own paper, entitled "Insights into Component Digital Recording Technologies," in which he sketched the technology behind component digital recording in the videotape recorder. Eric Pohl concluded the program by spelling out the role of the SMPTE standards and engineering committees in relation to the industry, and the Society's responsibilities as the telecommunications, computer, and consumer electronics fields become interconnected by video and imaging.

"The Compression Experience" was sponsored by Eastman Kodak Co., the Rochester Convention Center, Sony Electronics, WXXI PBS TV-21, and Xerox. Those responsible for making the tutorial a success include Executive Chairman John Cerquone, Sony; Co-Chairman Richard Schafer, Eastman Kodak (retired); Program Chairman Arthur Cosgrove, Eastman Kodak; Program Co-Chairman Roland Zavada, Eastman Kodak (retired); Arrangements Committee members Donald Roberts, WHEC-TV, Tim Stoffel, WXXI, Paul Kanerva, Eastman Kodak, and Alex Alexandrov, State University of New York's College at Brockport; Publicity Chairman Thomas Hope, Hope Reports; Rochester Section Secretary/Treasurer Walter C. Snyder II, Eastman Kodak; and former Rochester Section Chairman Alan Masson, Eastman Kodak.

Audio recordings of "The Compression Experience" can be purchased for \$35. Anyone interested in buying the tutorial package, which contains the tapes plus the printed papers, may do so by faxing Walter Snyder at (716) 726-9453, or writing to him at 53 Marblehead Dr., Rochester NY 14615.

— Thomas Hope, Hope Reports