Section Meetings

Chicago
December 9, 1999

The Chicago section held a meeting on December 9 at Roscor. Jim Melvin, SightPath, Inc., discussed his company's innovative approach to delivering television-quality video on the Web utilizing a breakthrough technology called self-organizing distributed appliances (SODA). Describing the science behind the technology, Melvin noted that SODA software, developed by researchers at MIT, turns commodity computing nodes into a topology-aware, controlled content replication and routing system. SODA moves content efficiently and intelligently to server nodes spread throughout the network. It then provides single-URL redirection to the closest and/or best copy of content. The self-organizing aspect of SODA technology allows new nodes to be added at any time, anywhere on the network. These new nodes announce their presence, acquire appropriate content, and become part of a particular SODA network, without the need for setup or administration by IT personnel.

Furthermore, because each SODA node is topology-aware, local usage and traffic information is aggregated by a SODA network to make optimal content delivery decisions in realtime. SODA is a form of application-level multicasting providing the packet efficiencies of multicasting, but with high reliability, flexibility, and simple implementation across any IP network. Melvin went on to explain how the technology is applied within SightPath's product offerings. A question-and-answer period followed his formal presentation. — Steve Robinson, Secretary/Treasurer.

Detroit
November 9, 1999

Roscor Michigan hosted and provided refreshments for the November 9, 1999 meeting of the Detroit Section at their offices in Farmington Hills. Jim Edwards, Tektronix, was the speaker. Edwards has been with Tektronix since 1982 and is a district sales and account manager. He is currently Governor of the Southern Region of SMPTE and has also served as Chairman of the Nashville Section.

Edwards described a system that provides a fast, practical, and repeatable objective measurement alternative to subjective evaluation of picture quality. He explained that the best measure of any analog or digital television system is viewer satisfaction with the image. Traditionally, the quality of analog and full-bandwidth digital video systems has been evaluated indirectly by measuring the distortions of static test signals. Compressed television systems, however, pose a far more difficult measurement challenge. Picture quality in these systems changes dynamically based on the data rate, picture complexity, and encoding algorithm employed. The static nature of test signals does not provide true characterization of picture quality. Natural test scenes that are far more complex than test signals must be used to stress the capabilities of compressed video systems. A question-and-answer session followed the presentation. — Helge Blucher, Secretary/Treasurer

Napa Valley College
November 29, 1999

On November 29, 1999 SMPTE Chapter 11 at Napa Valley College hosted a high-definition television (HDTV) demonstration. Mike Cannon, technical expert, Snader and Associates presented the demonstration, which was open to students, teachers, industry colleagues, and the general public. A Sony flat monitor and a projection system using the 480P format was used. Mike Cannon and Scott Cyphers of Snader and Associates ensured the technical success of the program by arriving weeks in advance to test the antenna to receive a 720P HDTV signal. — Jodie Capriotti, Student

Rocky Mountain
November, 1999

KCNC News 4 in Denver hosted "Careers Night," presented jointly by the SMPTE Rocky Mountain Section and Section 48 of the Society of Broadcast Engineers. Eighty students from Auraria Campus, Brighton Charter Schools, ITT Technical College, AIMs Community College, various high schools and instructors attended. The event is intended to familiarize area college students with careers in fields related to broadcast engineering.

Moderated by Scott Barella and Doug Houston, KCNC, the program included the following presenters: Bill Harris, AM/FM stations in Denver, provided insight into the aspects of radio station engineering and responsibilities from small stations to large group ownership station. Scott Barella discussed various aspects of television engineering and the qualifications for positions within his operation at KCNC. Doug Houston, KCNC, described television station operations, various aspects of managing a station, and qualifications for various disciplines. Rome Chelsi, SMPTE Section Chairman, gave an overview of the manufacturing sector in the television industry and the role of product managers, as well as SMPTE activities. Fred Baumgartner, ST&T Broadband and Internet Services, explained the Society of Broadcast Engineers' Certification Program. Baumgartner is chairman of that program.

A question-and-answer panel discussion, moderated by Eric Schultz, followed the formal presentation. KCNC then provided the students with a studio tour to cap off the evening. Categorically, from the responses received afterwards, the program was a tremendous success; it was unfortunate that almost 100 additional students had to be turned away.

Thanks to KCNC for providing the facilities and Philips Video Systems for the refreshments. — Rome Chelsi, Section Chairman

Sacramento
December 4, 1999

The Sacramento Chapter meeting was held at the Colfax Theatre in Colfax, CA on December 4, 1999. Larry Hornbeck, Texas Instruments, gave a presentation on the features of DLP Cinema and its application in projectors used for computers, video and film.

The very interesting talk concentrated on the development of the digital micromirror device (DMD) and how it is used in digital light projectors. Hornbeck discussed the history of motion picture projectors and how the DLP offers improvements over conventional film projection. He also covered the operation of the Texas Instruments DMD integrated circuits and its construction of millions of tiny mirrors. The projector construction was explained showing how the reflected, filtered light is used to create an image: digital information controls the on/off ratio of the individual mirrors to control the brightness of each picture element.

The meeting concluded with the presentation of a movie. — Mike Betts, Secretary/Treasurer

Section Calendar

Rocky Mountain
Upcoming events

February 16, 2000 Kelly Hannig, Gentner Remote Control - 6:30PM, KCNC

March 16, 2000 TBA

April 8-13, 2000 NAB Convention, Las Vegas, Nevada