ITU-T Workshop Video and Image Coding and Applications (VICA)

BIO

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Gary J. Sullivan Rapporteur ITU-T Q.6/16; Microsoft/USA

Chair and Speaker Session:

3: Digital Video

Title of Presentation Overview of H.264/MPEG-4 Advanced Video Coding (AVC)

Gary J. Sullivan is the ITU-T Rapporteur/Chairman of the ITU-T Video Coding Experts Group (VCEG), a Rapporteur/Co-Chairman of the ISO/IEC Moving Picture Experts Group (MPEG), and a Co-Chairman of the Joint Video Team (JVT), which is a joint project between the VCEG and MPEG organizations. He has led ITU-T VCEG (ITU-T Q.6/SG16) since early 1996 and is also the ITU-T video liaison representative to MPEG. In MPEG (ISO/IEC JTC1/SC29/WG11), in addition to his current service as a co-chair of its video work, he also served as the Rapporteur/Chairman of MPEG video from March of 2001 to May of 2002. In the JVT, he was the JVT chairman for the development of the next-generation H.264/MPEG-4 AVC video coding standard and for the development of its fidelity-range extensions (FRExt), and is now its co-chairman for the development of the scalable video coding (SVC) extensions. He received the Technical Achievement award of the International Committee on Technology Standards (INCITS) in 2005 for his work on H.264/MPEG-4 AVC and other video standardization topics.

He holds the position of video architect in the Core Media Processing Team of the Windows Digital Media division of Microsoft Corporation. At Microsoft he also designed and remains lead engineer for the DirectX(r) Video Acceleration API/DDI video decoding feature of the Microsoft Windows(r) operating system.

Prior to joining Microsoft in 1999, he was the Manager of Communications Core Research at PictureTel Corporation (now Polycom), the world leader in videoconferencing communication at the time. He was previously a Howard Hughes Fellow and Member of the Technical Staff in the Advanced Systems Division of Hughes Aircraft Corporation and was a Terrain-Following Radar (TFR) system software engineer for Texas Instruments.

He received the Ph.D. and Engineer degrees in Electrical Engineering from the University of California, Los Angeles, in 1991 He received the B.S. and M.Eng. degrees in Electrical Engineering from the University of Louisville J.B. Speed School of Engineering in Louisville, Kentucky, in 1982 and 1983, respectively.

His research interests and areas of publication include image and video compression, rate-distortion optimization, motion estimation and compensation, scalar and vector quantization, and error/packet-loss resilient video coding.