

Chapter Eleven

MPEG Video and Audio Coding

Video Compression

The Moving Picture Experts Group (MPEG) was established in 1988 to create a standard for delivery of digital video and audio. Membership grew rapidly from about 25 experts in 1988 to a community of hundreds of companies and organizations .

It is appropriately recognized that proprietary interests need to be maintained within the family of MPEG standards. This is accomplished by defining only a compressed bitstream that implicitly defines the decoder. The compression algorithms, and thus the encoders, are completely up to the manufacturers.

MPEG-1

The MPEG-1 audio/video digital compression standard was approved by the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) MPEG group in November 1991 for *Coding of Moving Pictures and Associated Audio for Digital Storage Media at up to about 1.5 Mbit/s*. Common digital storage media include compact discs (CDs) and video compact discs (VCDs).-----

Individual Assignment Q1

Explain The following terms briefly(marks 10%)

MPEG-1

MPEG-2

MPEG-4

MPEG-7

Audio Compression

Compression of audio information is somewhat special in multimedia systems. Some of the techniques used are familiar, while others are new. In this chapter, we take a look at basic audio compression techniques applied to speech compression, setting out a general introduction to a large topic with a long history.

Individual Assignment Q2 (marks 10%)

Q2.List and Define MPEG Audio compression Layers