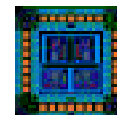


Digital Video Technology

Outline

- Video Basics
- Video Compression Fundamentals
 - compression for multimedia and video applications
- Compression Algorithms
 - Lossless compression & Entropy
 - Lossy compression & rate-distortion theory
- Standard Bodies:
 - ISO: SC29WG01 (JPEG, JBIG), SC29WG11(MPEG)
 - ITU-T: H.261, H.263, H.263+
- JPEG Standard
- MPEG Standards
- H26x Standards
- HDTV



Requests

■ Reference Books

- 1. “Image and Video Compression Standards”
 - V. Bhaskaran & K. Konstantinides
 - Kluwer Academic Pub.
- 2. “Digital Video:An introduction to MPEG-2”
 - B.G. Haskell & A. Puri & A.N. Netravali
 - Kluwer Academic Pub
- 3. Standard Documents
 - JPEG, H261, MPEG2, H263, MPEG4
- 4. “Digital Video Processing”
 - A.M. Tekalp, Prentice-Hall (新月)

■ Homeworks, Examinations & Term report

- to be announced on web

■ Grading

- participation and above, percentage to be announced on w

