EE7700-2 Digital Video and HDTV

Spring 2010

Class hours: MWF 1:40 - 2:30 (Tureaud Hall 201)

Instructor: Bahadir K. Gunturk

Description:

The course will cover fundamentals of digital video and high-definition TV. Topics will include basics of image acquisition and display, color science and color coding, image and video compression techniques and standards (e.g. JPEG, MPEG, and H.26x), video processing (e.g. filtering, sampling, interpolation, deinterlacing, and gamma correction), standard-definition and high-definition video standards, and digital TV broadcasting basics and standards.

Textbook (recommended):

"Digital Video and HDTV: Algorithms and Interface" by Charles Poynton, Morgan-Kaufmann Publishers.

Grading Policy:

Midterm: 35%

Final: 40%

Projects: 25%