EECS 207
Spring 2021

Lecture 6

Reading Assignments

- By Thurs. Jan. 21:
  - Chap. 1: Introduction
  - Chap. 2: Digital Image Fundamentals
  - Chap. 4: Filtering in the Frequency Domain
    - Section 4.1: Background
    - Section 4.2: Preliminary Concepts
    - Section 4.3: Sampling and the Fourier Transform of Sampled Functions
    - Section 4.4: The Discrete Fourier Transform of One Variable
- By Tues. Feb. 2:
  - Section 4.5: Extensions to Functions of Two Variables.
  - Section 4.6: Some Properties of the 2-D DFT and IDFT

Announcements

- I have started posting the Zoom recordings of the lectures on CatCourses:
  - You should be able to find the recordings of the first four lectures under "Media Gallery".
  - Please let me know if you have any trouble accessing the recordings.
- I will post “sets” of lecture notes and slides to the course website at appropriate intervals (rather than per lecture).

Questions?

Today

- What is an image?
- Chap. 4: Filtering in the Frequency Domain
  - Motivation for signal processing/Fourier analysis.
  - Preliminary concepts:
    - Fourier series.
    - Impulses and sifting.
    - Fourier transform of continuous functions in 1D.
    - Convolution of continuous functions in 1D.