EECS 207
Spring 2021

Lecture 8

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

Questions?

Today

- Chap. 4: Filtering in the Frequency Domain.
  - Sampling continuous functions:
    - Fourier transform of sampled functions.
    - Sampling theorem and aliasing.
  - Discrete Fourier transform (DFT) in 1D.
  - Extension to 2D:
    - 2D sampling.
    - Aliasing in images.
  - Properties of the 2D DFT.