EECS 207
Spring 2021

Lecture 17

Homework

- HW 1 assigned on CatCourses.
- It will be due:
  - Thursday, April 1 by 11:59pm
  - Via CatCourses
  - As PDF
- I will try schedule online office hours from 11am-noon on Wed. March 31 to answer questions about the homework.
- If you can't make that time, contact me to schedule an appointment.
- You can also email me with (simple) questions.

Project

- One course project: Content Based Image Retrieval
- Individual effort—no teams.
- Will turn in project report at end of semester (exact dates TBD).
- No presentation.
- Details to follow.

Reading Assignments

- Read sections of Chap. 3 about spatial filtering:
  - 3rd Edition:
    - Section 3.4 Fundamentals of Spatial Filtering
    - Section 3.5 Smoothing Spatial Filters
    - Section 3.6 Sharpening Spatial Filters
  - 4th Edition:
    - Section 3.4 Fundamentals of Spatial Filtering
    - Section 3.5 Smoothing (Lowpass) Spatial Filters
    - Section 3.6 Sharpening (Highpass) Spatial Filters
    - Section 3.7 Highpass, Bandreject, and Bandpass Filters From Low-Pass Filters

Reading Assignments

- Finish Chap. 4 (4th edition):
  - Section 4.7 The Basics of Filtering in the Frequency Domain
  - Section 4.8 Image Smoothing Using Lowpass Frequency Domain Filters
  - Section 4.9 Image Sharpening Using Highpass Filters
  - Section 4.10 Selective Filtering
  - Section 4.11 The Fast Fourier Transform

Questions?

Today

- Chap. 4: Filtering in the Frequency Domain
  - Image smoothing using lowpass frequency domain filters.
  - Image sharpening using highpass frequency domain filters.
  - Selective filtering.
  - The fast Fourier transform (FFT).