

CS 111: Digital Image Processing

Aditi Majumder

Instructor

- Aditi Majumder
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The Course

- Fun course
- You will implement things and see results
- Digital Image Processing
- Do not worry about grades, enjoy the course
- Tell your friends

Course Load

- Learn about both 1D and 2D
- Programming Assignments mostly on 2D
 - Image Processing
- Written Assignments
- Midterm: 7 May (Thursday)
- Finals

Assistance

- TA: Hamed Pirsiavash
 - hpirsiav@ics.uci.edu
- Discussions
 - Help with programming assignments
 - Help with written assignments
 - Some discussions
- No late homework submission
- TA office hours – Monday 2:30-3:30pm
- My office hours – Thursday 10-11am

Syllabus

- Signals and Linear Systems (0.5)
- Convolution and Properties (2)
- Fourier Transform and Properties (3)
- Continuous Signal Processing (0.5)
- Applications to Audio and Image Processing (4)

Hands On Experience

- Filtering (Low, high, and band pass)
- Edge Crispening
- Edge Detection
- Feature Detection
- Noise Cleaning
- FFT and Convolution
- Image Resampling
- Image Morphology