



# CS 111: DIGITAL IMAGE PROCESSING

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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: 28 April (Thursday)
- Finals: Jun 7 (Tuesday)

# Assistance

- TA: Shan Jiang
  - [sjiang4@uci.edu](mailto:sjiang4@uci.edu)
- Discussions (Friday 1-1:50pm)
  - Help with programming assignments
  - Help with written assignments
  - Some discussions
- No late homework submission
- TA office hours – Wednesday 2pm-3pm (DBH 4243)
- My office hours – Tuesday 10am-11am (DBH 4056)

# 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