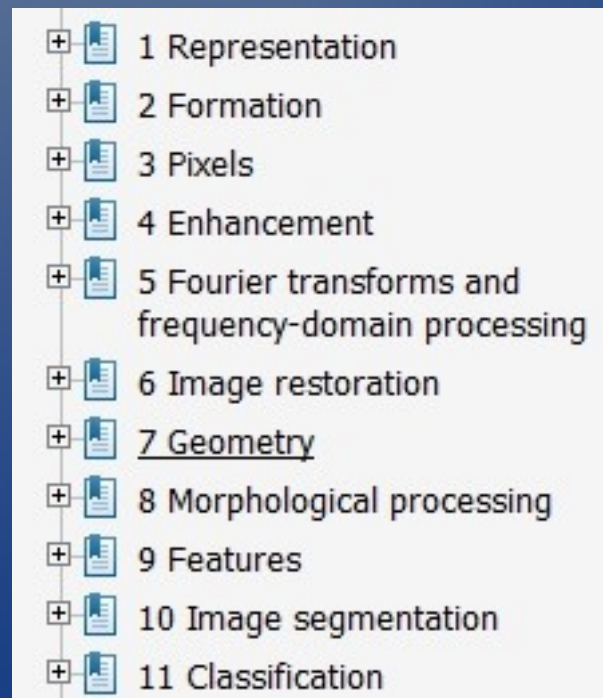


Week 1

Cody Seibert

Readings

- Fundamentals of Digital Image Processing: a Practical Approach with Examples in MATLAB
 - Read all chapters (1 through 11)
 - Skimmed chapters 5 and 6



+ [document icon]	1 Representation
+ [document icon]	2 Formation
+ [document icon]	3 Pixels
+ [document icon]	4 Enhancement
+ [document icon]	5 Fourier transforms and frequency-domain processing
+ [document icon]	6 Image restoration
+ [document icon]	<u>7 Geometry</u>
+ [document icon]	8 Morphological processing
+ [document icon]	9 Features
+ [document icon]	10 Image segmentation
+ [document icon]	11 Classification

Optical Flow

- Implemented Lucas-Kanade optical flow with pyramids.
 - Used flowToColor.m to show magnitude and direction of flow

Image 1

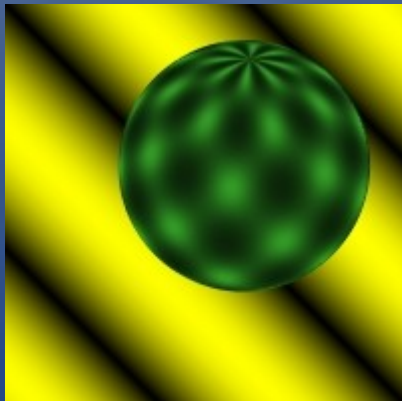
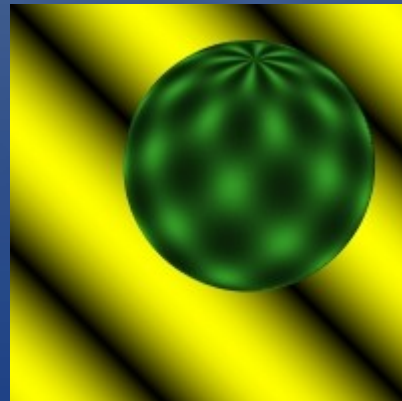
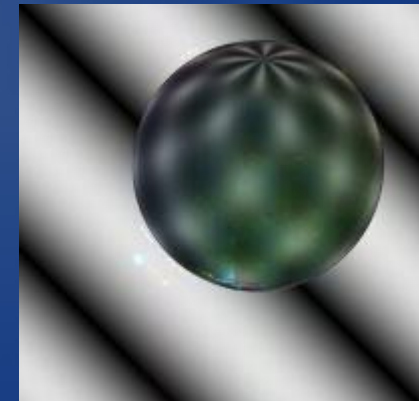
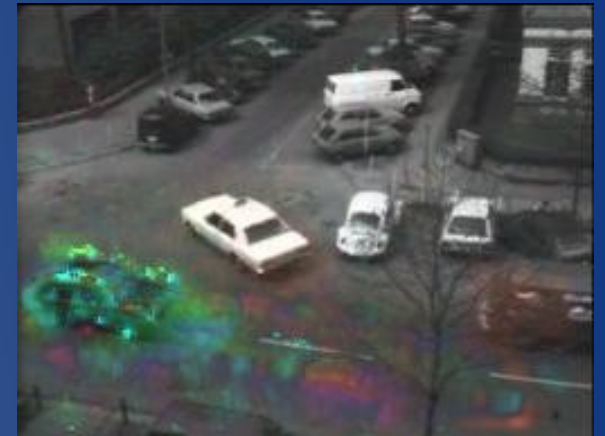


Image 2



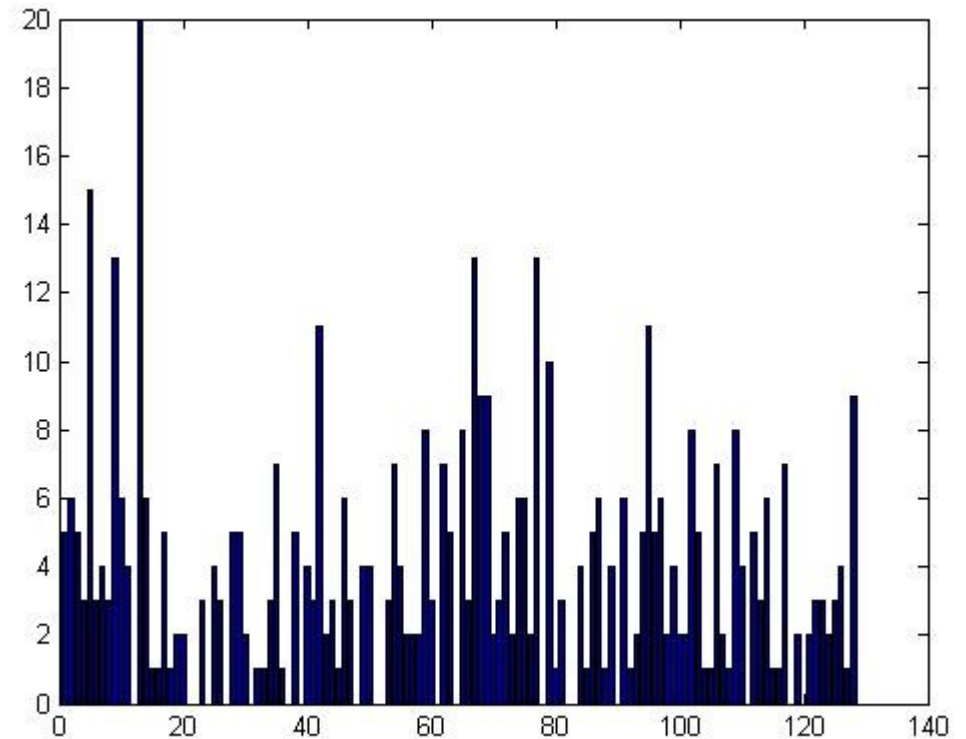
Flow





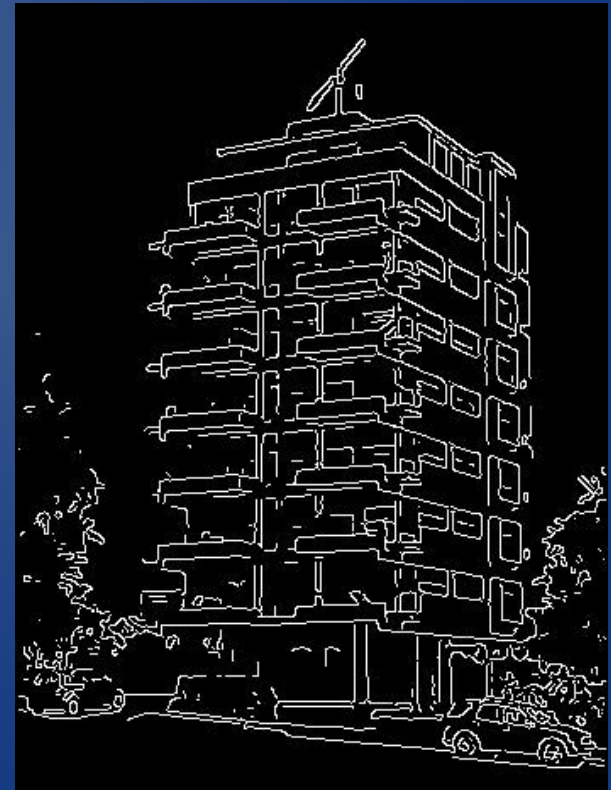
Sift Descriptor

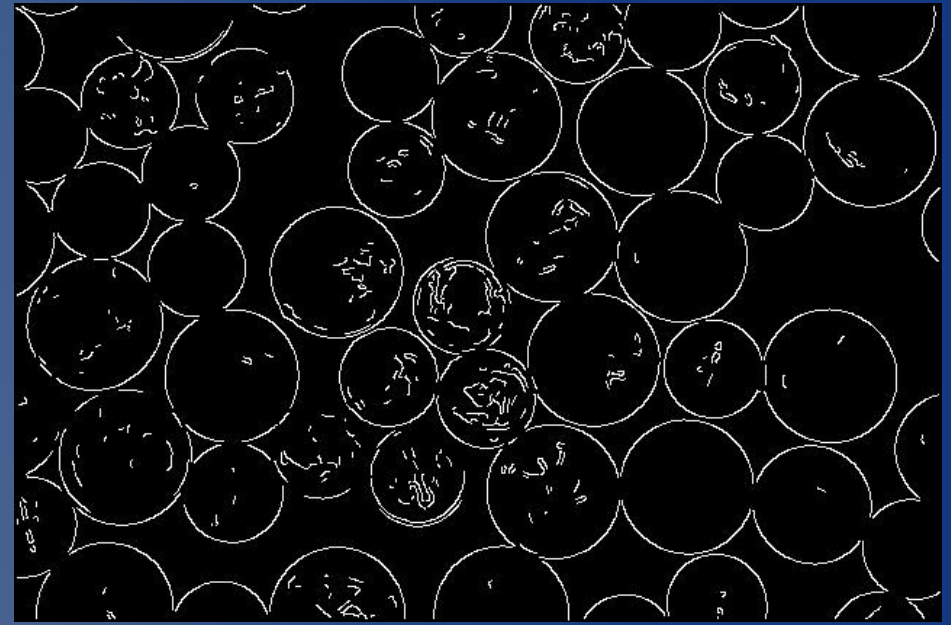
- Input patch of 18x18 centered at (100, 200)



Canny Edge Detection

- Issues:
 - Crashes Matlab on specific threshold values (assuming it is stack overflow)





Projects of Interest

- Crowd counting by estimation of texture repetition -Imran Saleemi
- Visual Saliency Detection -Nasim Souly
- Web-Assisted Object Detection for Outdoor Scenes -Amir R. Zamir