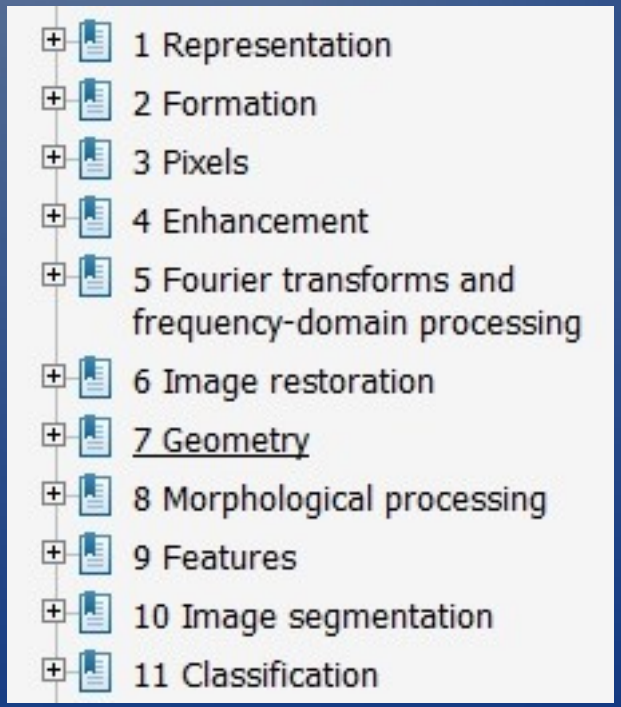
Week 1

Cody Seibert

Readings

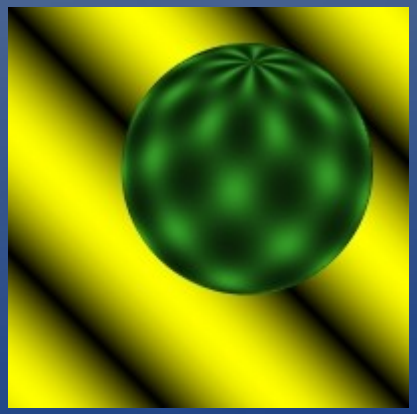
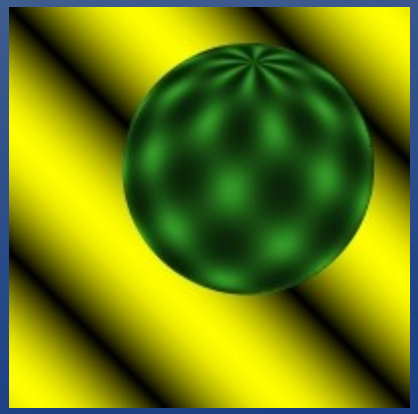
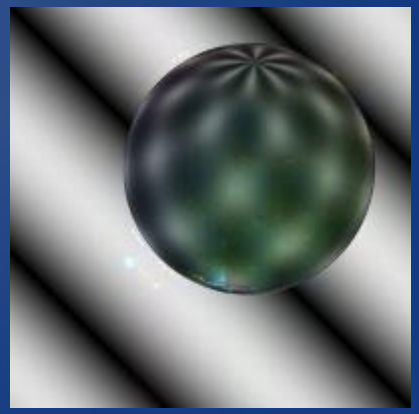
- Fundamentals of Digital Image Processing: a Practical Approach with Examples in MATLAB
  - Read all chapters (1 through 11)
  - Skimmed chapters 5 and 6

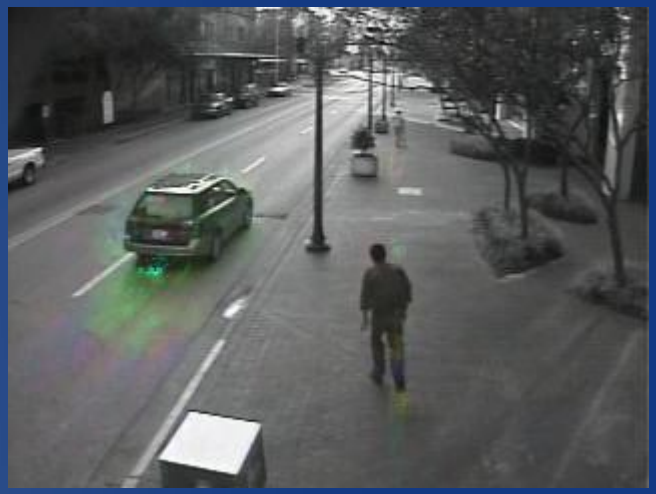


Optical Flow

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

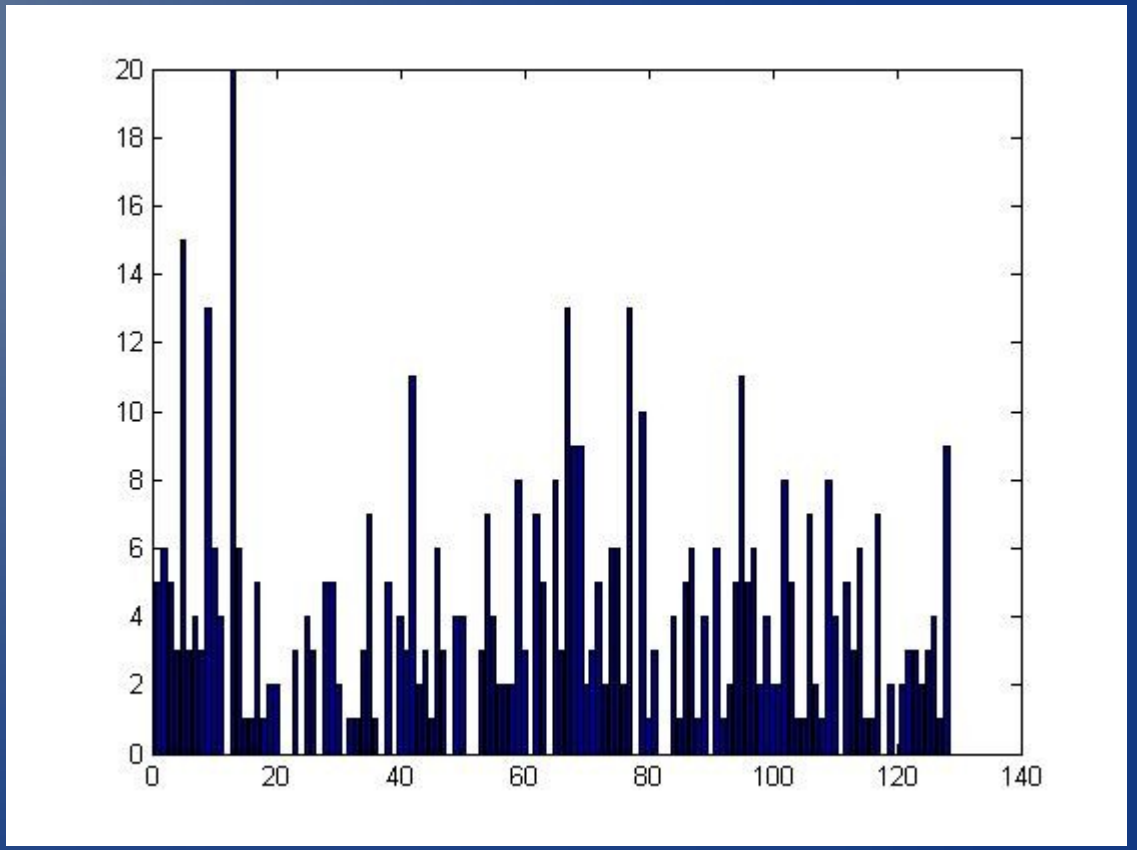
Image 1 Image 2 Flow



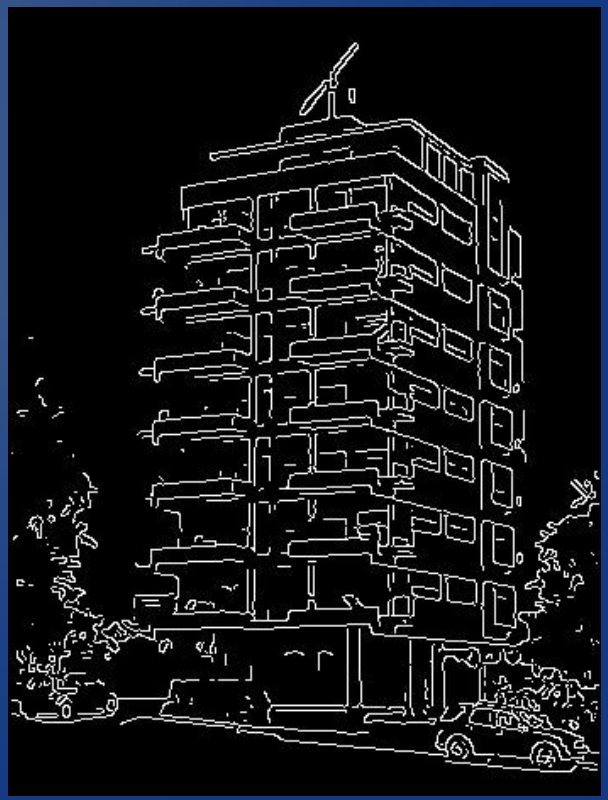
Sift Descriptor

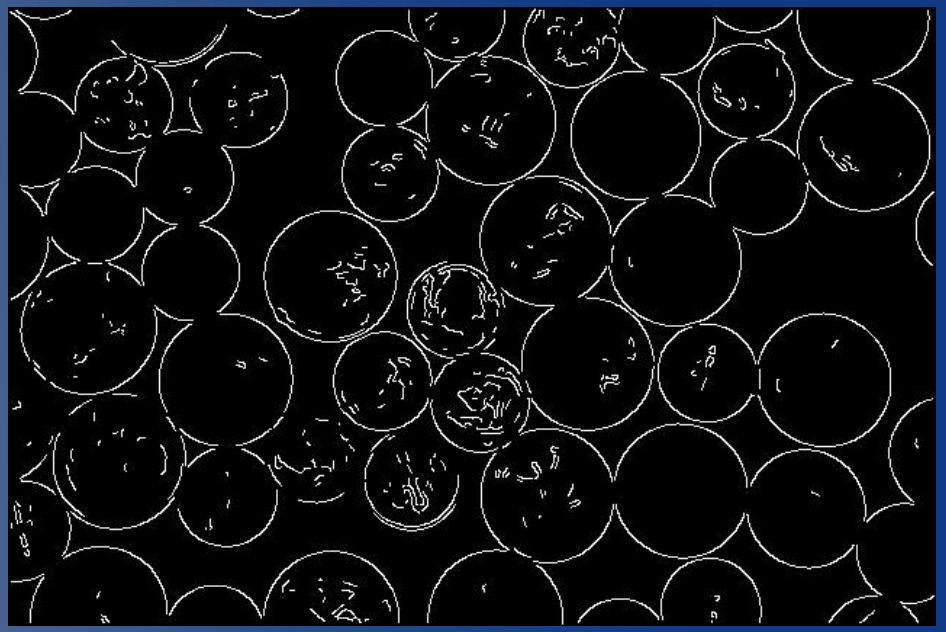
- Input patch of 18x18 centered at (100, 200)



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