Week 5
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Dense Sift

- Fixed some bugs in my code
- Using dense sift to create the clusters
- Averaging the cluster patches results in some visible features
Dense Sift (Centers and Patches)
Attempt to Count

- Choose the best cluster center (by hand)
- Compute a distance map from each pixel to the best cluster center.
- Threshold on distances less than X, where X is from 1-1000
- Bwlabel the threshold to get counts
Original Image
(counted ~325 by hand)
Center Descriptor
(2\textsuperscript{nd} row)
Distance Map
(Blue is close; red is far)
Bar Graph of Counts
Counting Error

- The original count was ~325; this method resulted in ~275
- Edges of image are not being processed
Need to Solve

- Choosing the best spatial bin size for the descriptor
- Choosing the cluster/s which are best for counting
  - Typically the average of the best clusters have features (instead of being solid color)
  - In different instances, these features are black circles or some form of silhouette
Fourier Transform

- Read some about it
- Need to see if it can help find the bin size or location of a person