

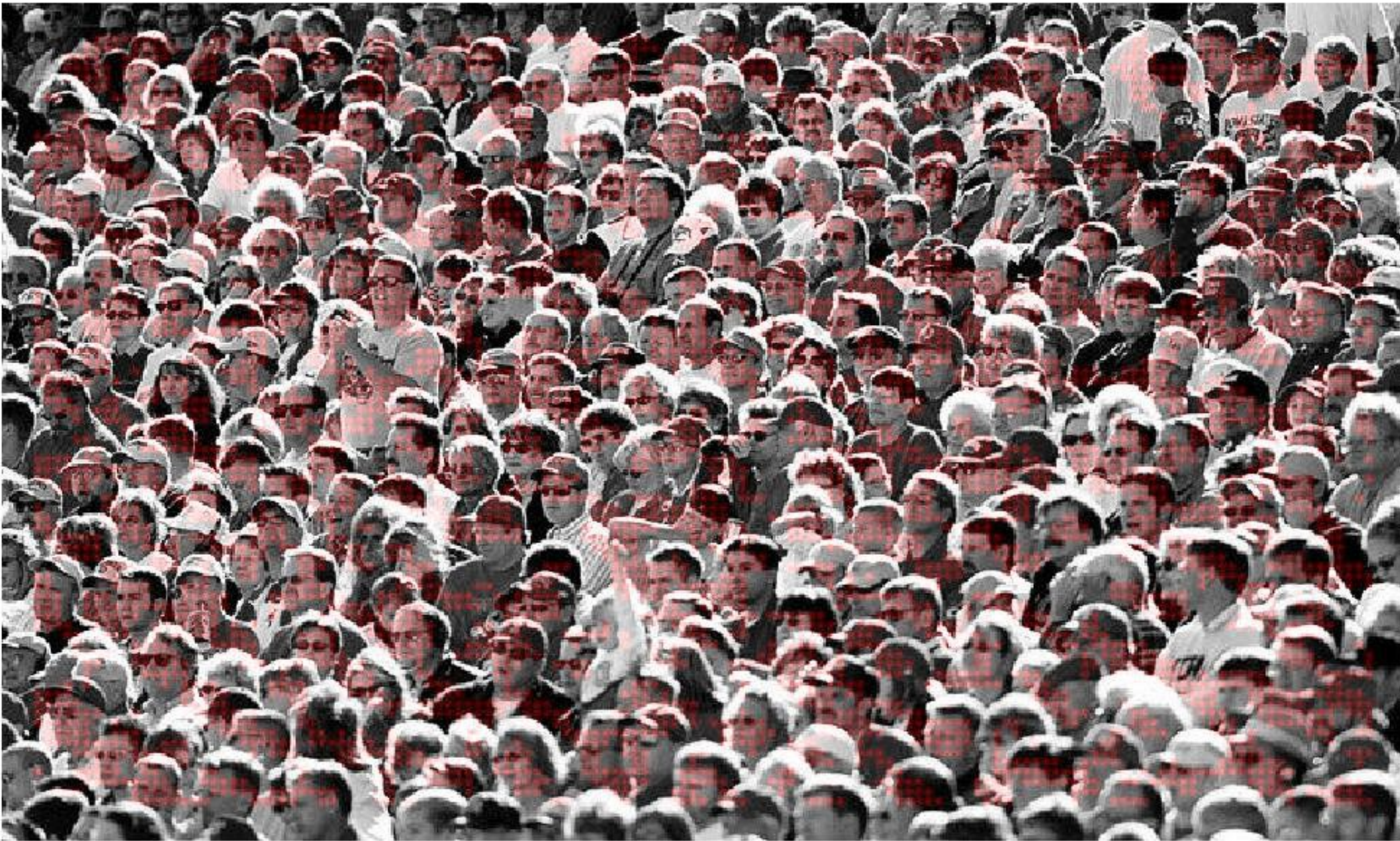
# Week 8

Cody Seibert

# Head Detector

- Using HOG for feature extraction
- SVM using 60 training examples (30 heads and 30 non-heads)
- Currently working towards implementing LIBSVM to get probabilities instead of binary







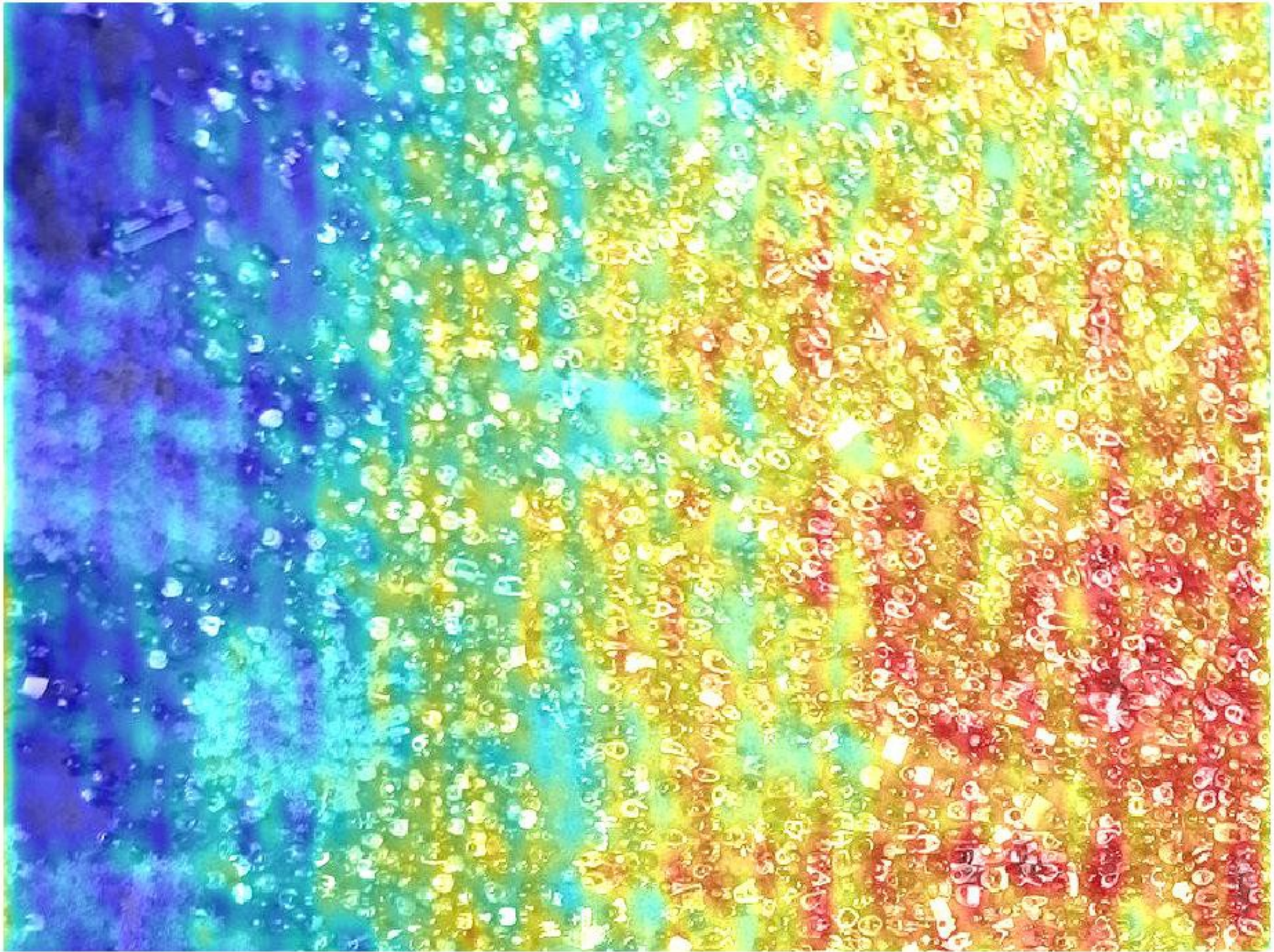


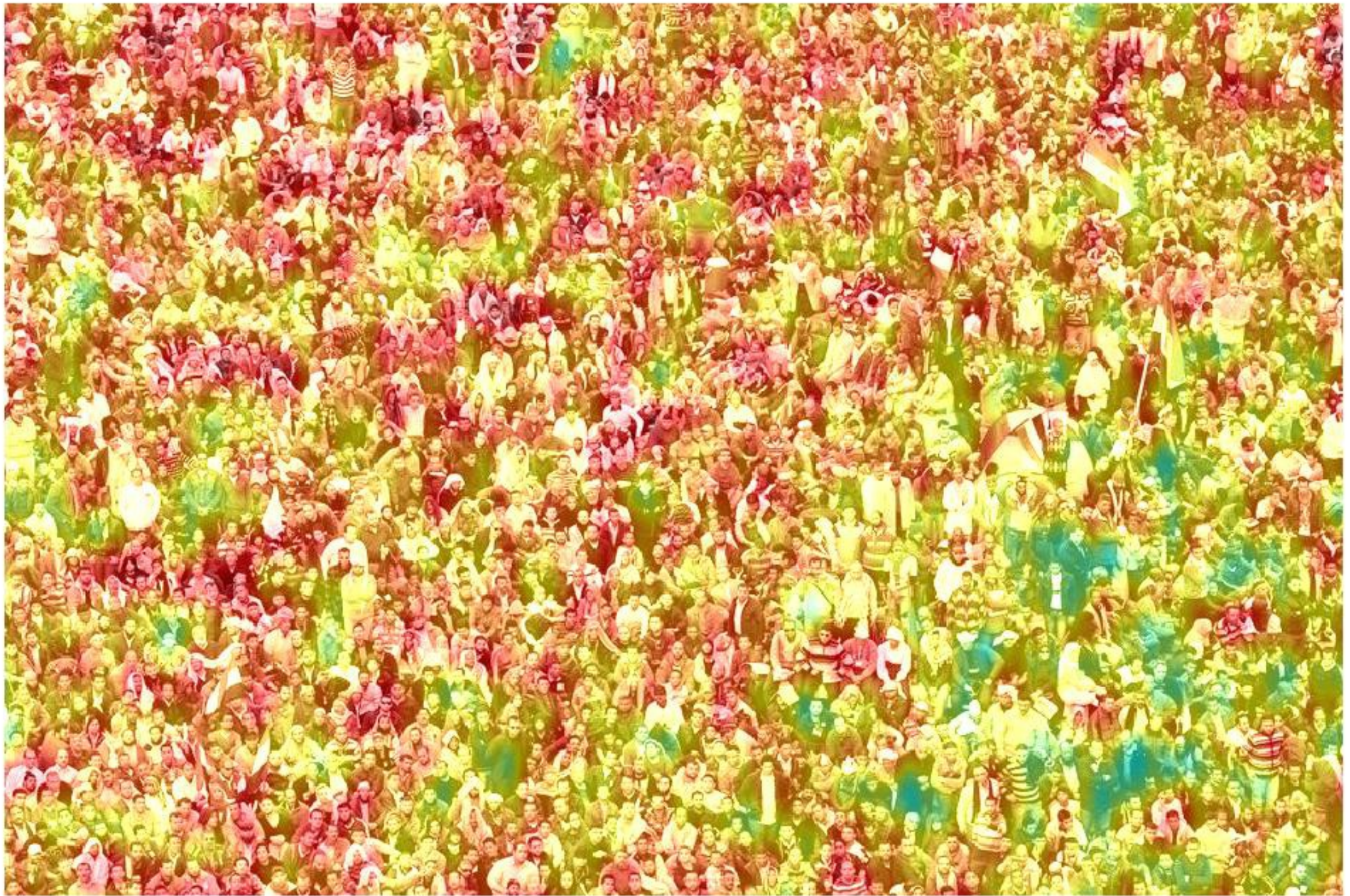
# Extracting Strongest Frequencies from Fourier Transform

- Take the gradient of the image
- Convert to frequency domain
- Take the highest points in magnitude and zero the rest
- Convert back to spatial domain









# Next Steps

- Improve the head detector
- Combine the probability map from the Fourier Transform with the probability map from the head detector
- Should reduce false positives from head detector
- Apply it to the texton method and see if better results occur