

Comparing Two Distributions

❖ Euclidean Distance

$$D(h, h') = \sqrt{\sum_{i=0}^n (h(i) - h'(i))^2}$$

❖ Chi-Square Distance

$$\chi^2(h, h') = \frac{1}{2} \sum_{i=1}^N \frac{(h(i) - h'(i))^2}{h(i) + h'(i)}$$

Comparing Two Distributions

- Histogram Intersection (Histogram needs to be normalised)

$$\text{int}(h, h') = 1 - \sum_{i=1}^N \min(h(i), h'(i))$$



Cars found by color histogram matching using chi-squared