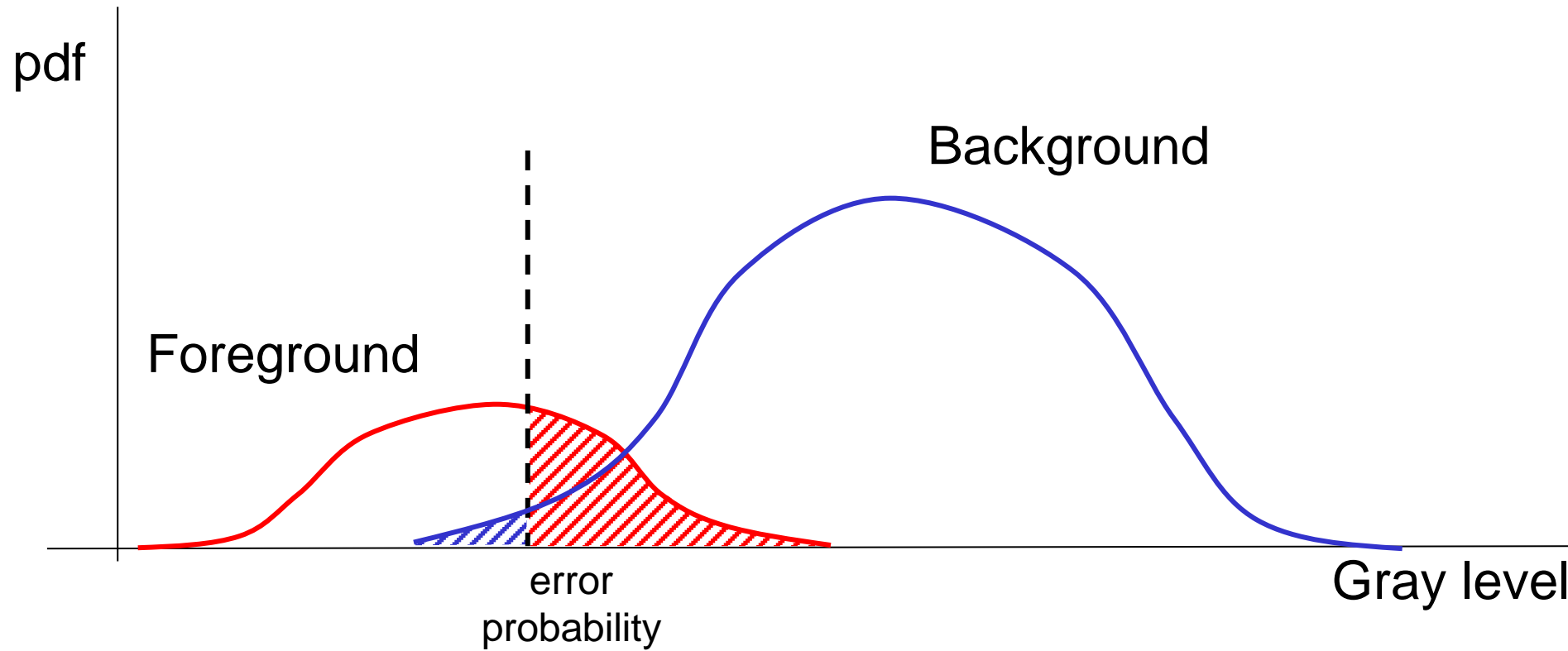
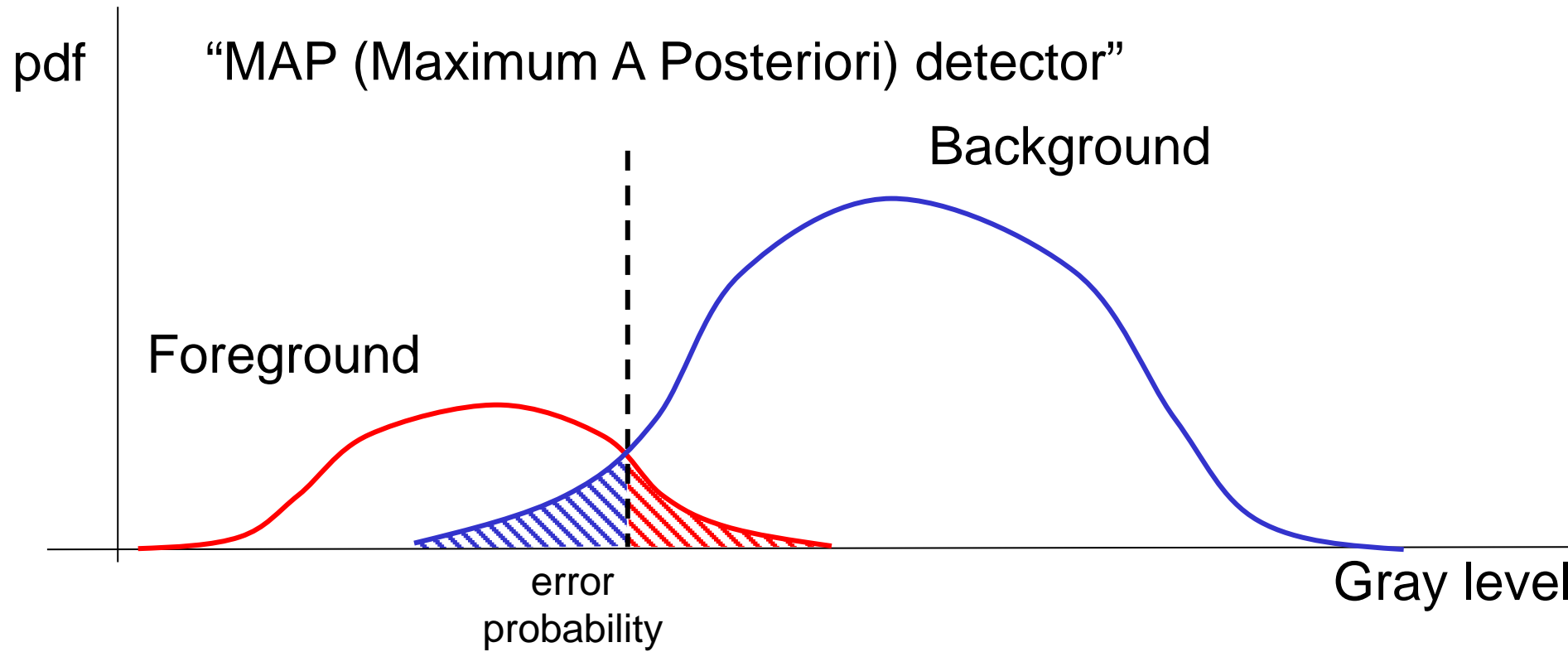


Supervised thresholding



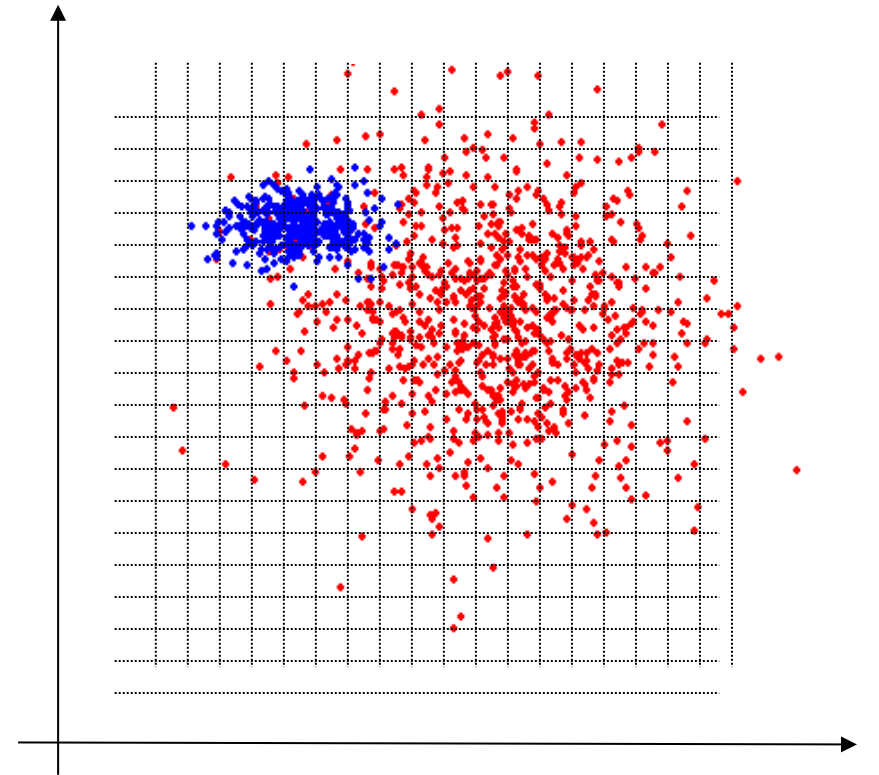
Supervised thresholding



If errors $BG \rightarrow FG$ and $FG \rightarrow BG$ are associated with different costs:
“Bayes minimum risk detector” is optimal.

Multidimensional MAP detector

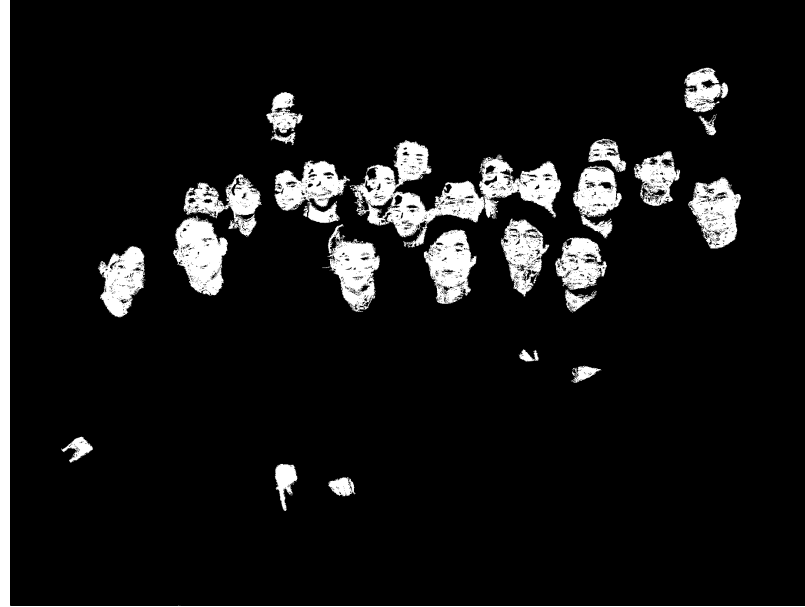
- Training
 - Provide labelled set of training data
 - Subdivide n-dimensional space into small bins
 - Count frequency of occurrence for each bin and class in training set, label bin with most probable class
 - (Propagate class labels to empty bins)
- For test data: identify bin, look up the most probable class



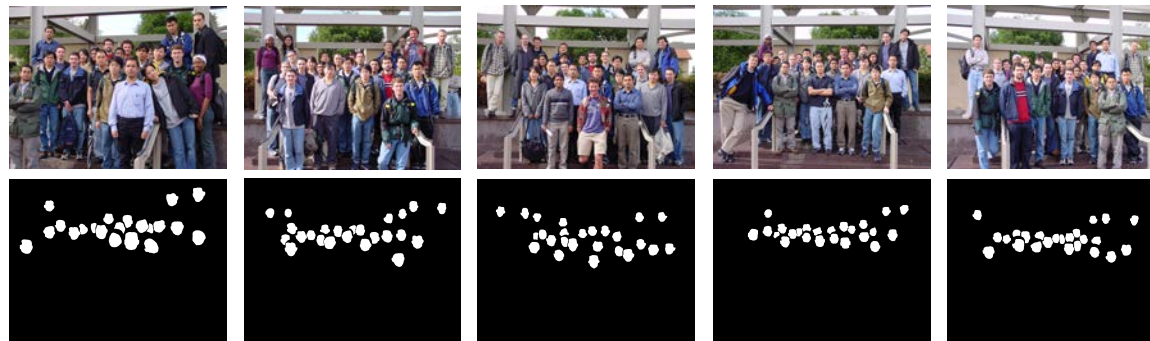
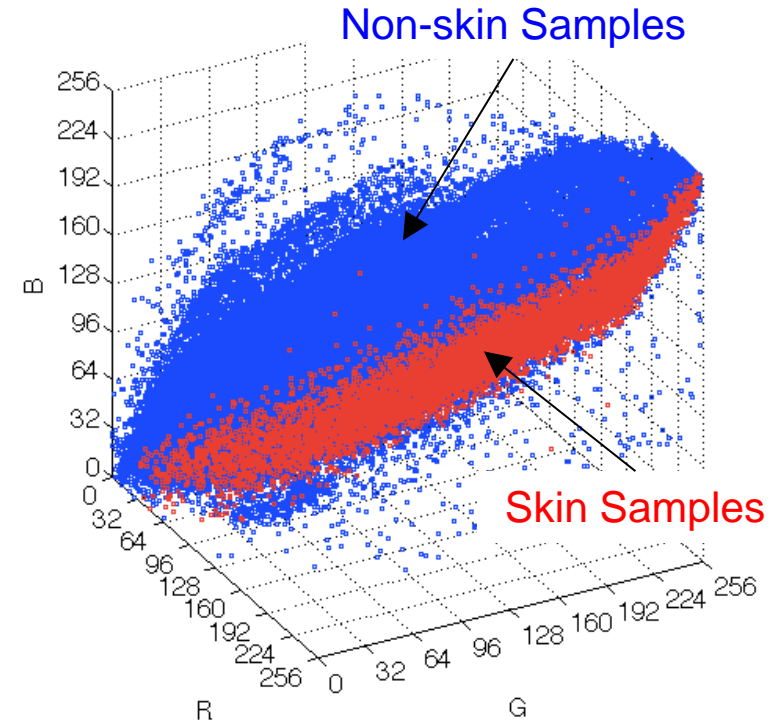
MAP detector in RGB-space



Original image



Skin color detector



Five training images

