

Today:

More Discrimination and Classification (Ch 11)

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Sec 11.6 Classification with Several Populations

Min Cost of Misclassification – priors, costs

p 614, (11-38) minimize expected “posterior” cost

when costs equal, choose group that maximizes posterior density

Normal Populations

criterion (11-45) includes generalized variance and statistical distance and prior.  
Note signs. See comment p 618.

Equal covariances (11-49) – express in terms of  $x - \bar{x}$ .

Note Bayesian comment p 618 re equal priors.

2 at a time discrimination p 624-5.

Special cases –  $p=2$ , or number of groups  $\leq 3$  p 625

Fisher – cf principal components p 630 - need equal covs

Other Approaches:

Logistic Regression

CART

Neural Networks

Data Mining Applications