

## Homework4 - ROC curves

- Create a function that generate a Gaussian distribution of 1000 random values between 1 and 10, and a STD less than 4. Plot two such distributions with about 30% overlap. Give the value of  $d'$ .
- Write a function that takes a decision threshold (between 0 and 10) and computes the fraction of false alarms and hits.
- Plot the ROC curve, and quantify its departure from the diagonal.