

Intelligent Systems: Reasoning and Recognition

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ENSIMAG 2
Exercise 1

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Performance Evaluation Metrics

- 1) What is precision? What does precision tell you about a classifier?
- 2) What is recall? What does recall tell you about a classifier?
- 3) What does it mean for an ROC curve to pass below the line from (0, 0) to (1, 1)? Use the mathematics to explain your answer.
- 4) You are given a classifier with an ROC curve for that passes the point (TPR = 0.99, FPR = 0.1). Is it possible to determine the Probability of Error for the classifier at this point? If yes, give the formula. If no, explain why.