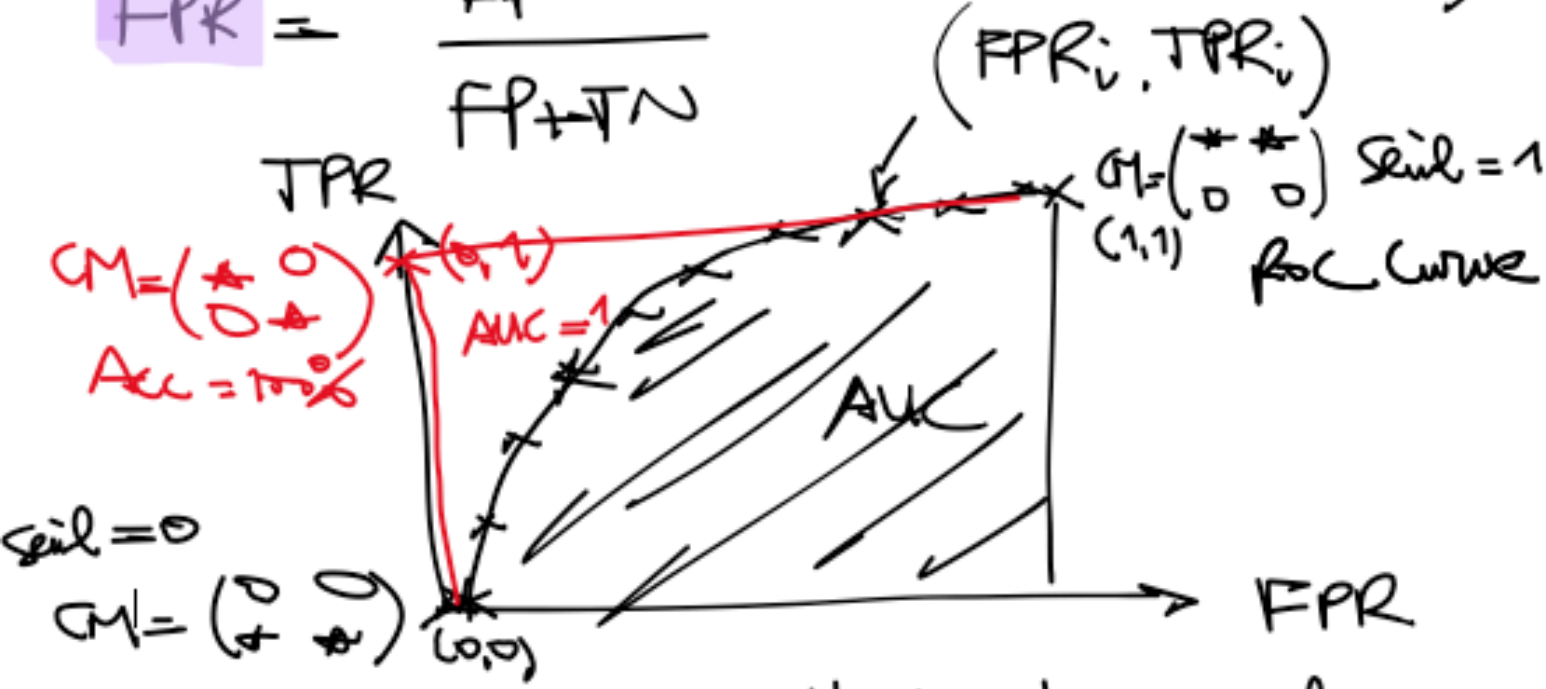
$$TPR = \frac{TP}{TP+FN}$$

$$FPR = \frac{FP}{FP+TN}$$

$$CM = \begin{pmatrix} TP & FP \\ FN & TN \end{pmatrix}$$



Threshold (seuil d'admissibilité à la classe des positifs).

Logistic Regression

$$y_{pred} = \frac{1}{1+e^{-\sum \alpha_i x_i}} \in [0,1]$$

$$\begin{cases} \text{si} & \geq 0.5 \rightarrow y_{pred} = 1 \\ \text{sinon} & < 0.5 \Rightarrow y_{pred} = 0 \end{cases}$$

$$\frac{1}{1+e^{-\sum}} = 0.6 \Rightarrow \begin{cases} pred = 1 & (\text{seuil} = 0.6) \\ pred = 0 & (\text{seuil} = 0.7) \end{cases}$$

$$\text{Seuil} \in [0,1] = [0.01; 0.2; \ldots; 0.9; 1]$$