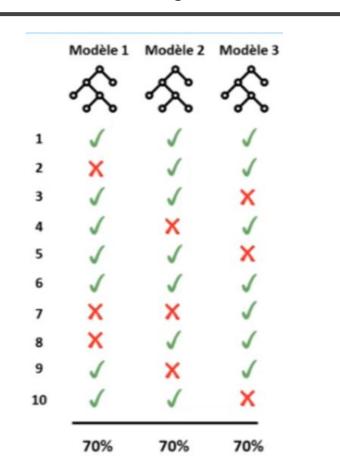
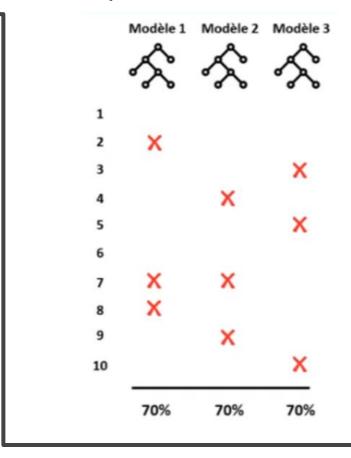
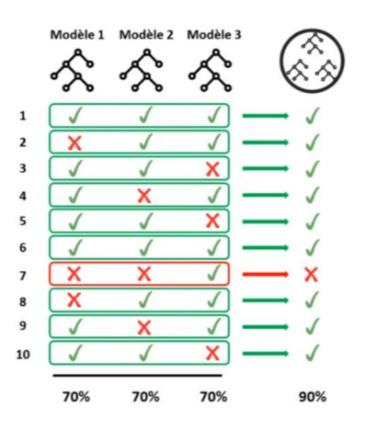
METHODE D'ENSEMBLE **Exemple Random Forest**

3 algorithmes entraînés séparément





Méthode d'ensemble:



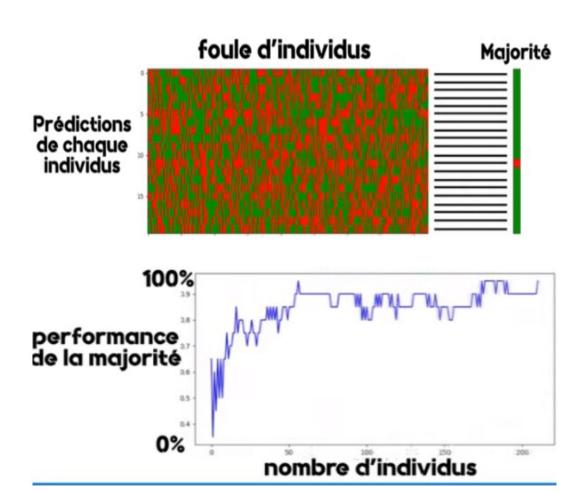
Wisdom of The Crowd

L'avis d'une foule d'amateurs est meilleur que celui d'un expert tout seul



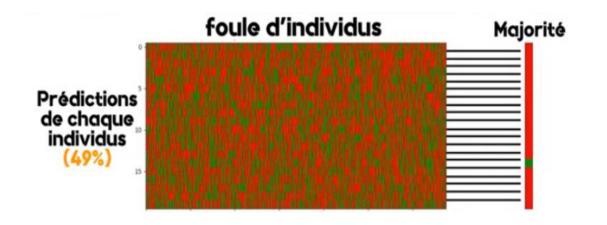
Respecter la règle 1 tu devras!!!

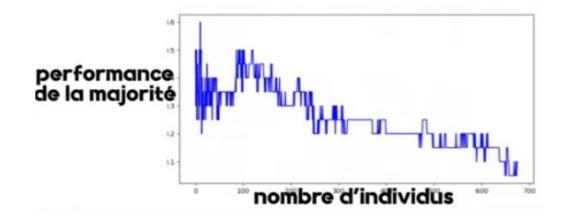




Respecter la règle 2 tu devras!!!

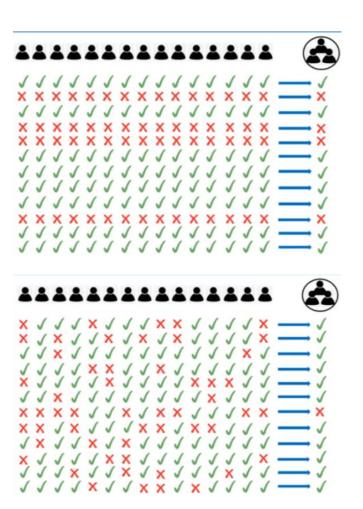


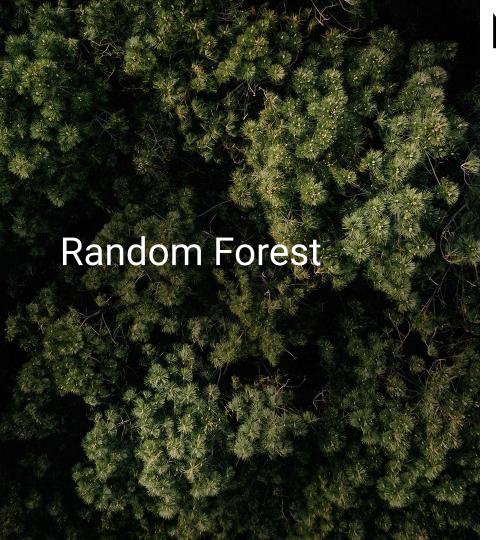




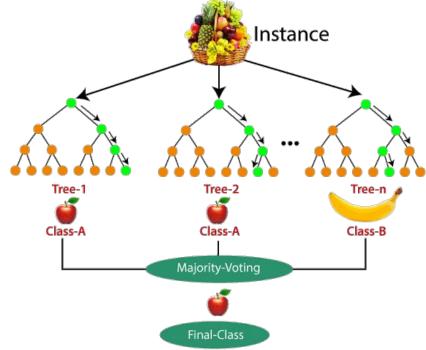
Respecter la règle 3 tu devras!!!





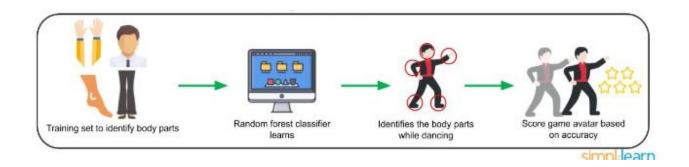


Méthodes d'ensemble

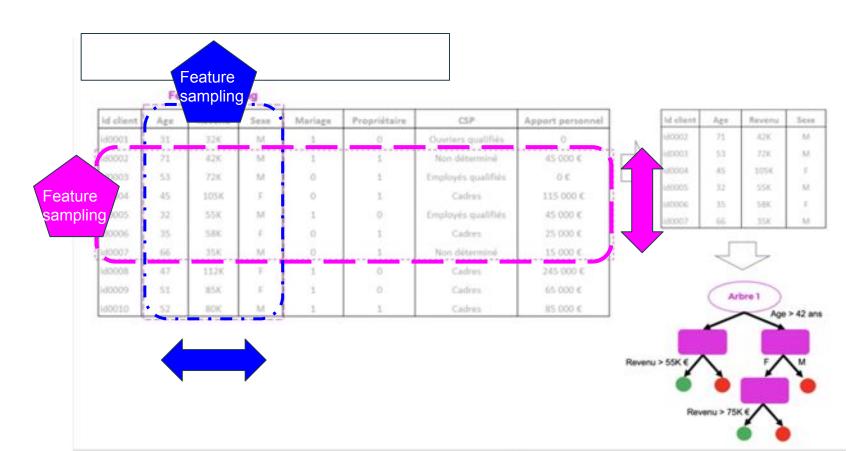


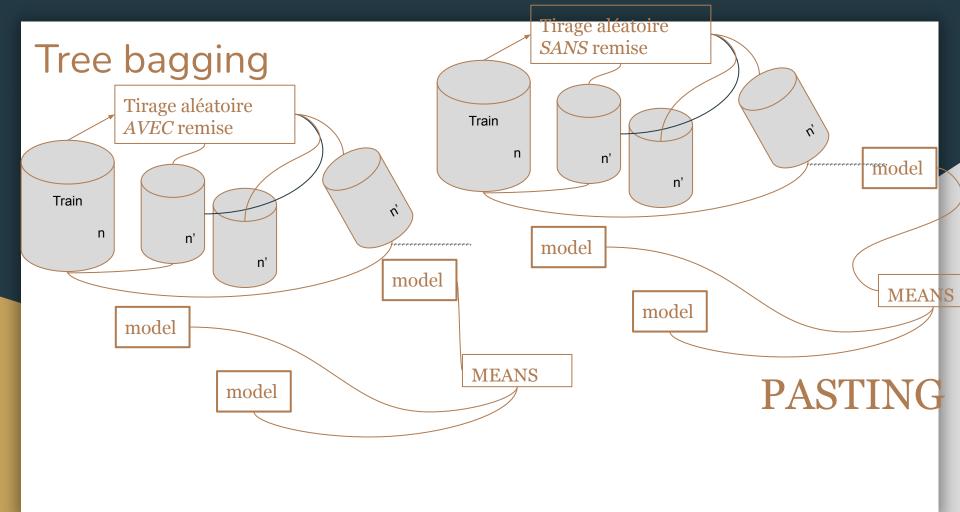
Cas d'usage du RandomForest

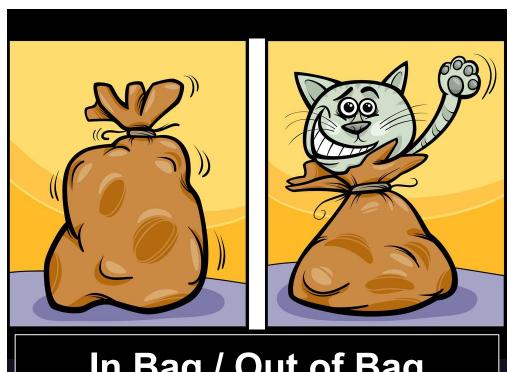




Bootstrapping

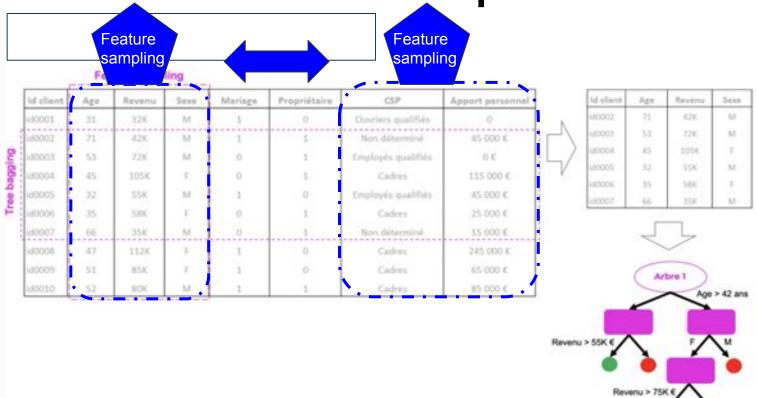




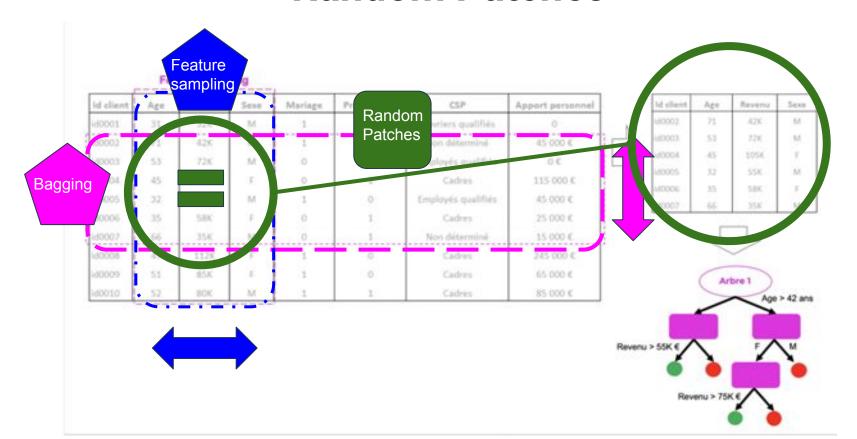


In Bag / Out of Bag

Random Subspace



Random Patches

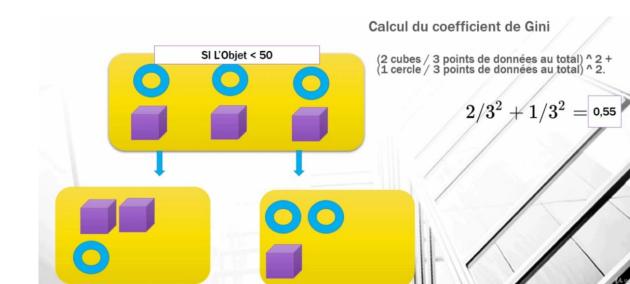


Lesquels de ces concepts sont utilisés par une Random Forest?

Random forest = tree bagging + feature sampling

Hyper paramètres

- criterion = 'gini'
- max_depth
- min samples leaf
- n_estimators



feature_importances

CONTEXTE

- Le principe des méthodes d'ensemble ;
- Les principes de "Bagging" et de "Pasting" ;
- Le principe d'évaluation "Out-Of-Bag";
- La méthode de "Random Subspaces";
- La méthode de "Random Patches".

Lesquels de ces concepts sont utilisés par une Random Forest?

Expliciter l'ensemble des paramètres de la fonction "RandomForestClassifier" de la librairie Scikit-Learn.

Question subsidiaire : à quoi sert la variable "feature_importances" ?

"La Majorité,

dont chaque membre pris à part n'est pas un homme remarquable, est cependant au-dessus des hommes supérieurs."

<u>Aristote - La politique</u>