Recap

TOTAL POINTS 4

1. Support Vector Machines (SVM) classifier belongs to a class of **1 / 1 point**

- ○ Nearest Neighbours based
- ○ Neural Networks
- ○ Tree-based models
- ◉ Linear models

✓ **Correct**

SVM is a linear model with special loss function. Even with "kernel trick", it's still linear in new, extended space.

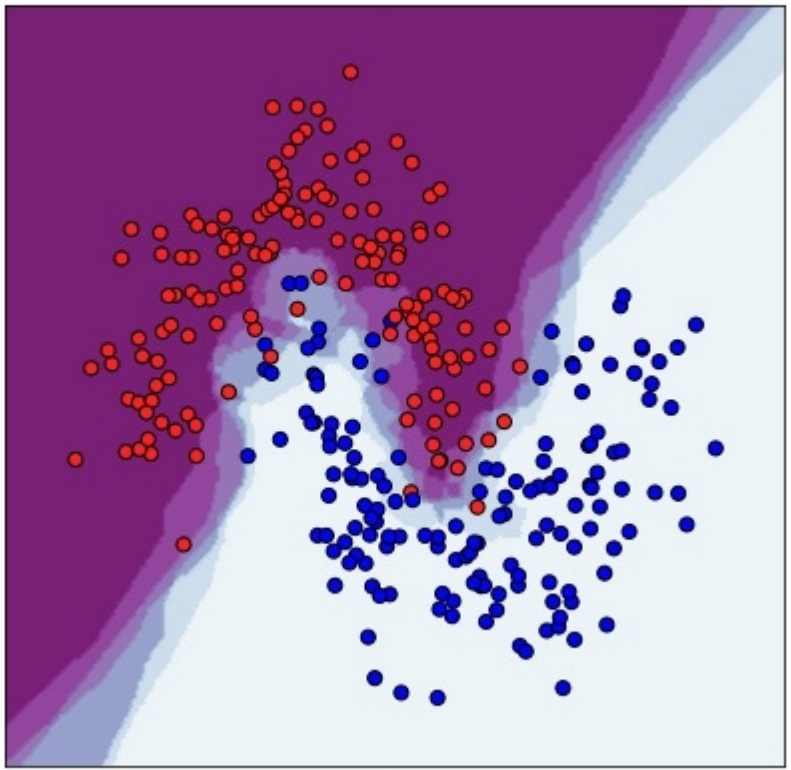
2. What is the difference between RandomForest and ExtraTrees models from sklearn? 1 / 1 point

- ExtraTrees classifier always uses only a fraction of features when looking for a split (in contrast to Random Forest, which uses all features)
- ExtraTrees classifier always uses only a fraction of objects when looking for a split (in contrast to Random Forest, which uses all object)
- ExtraTrees classifier always tests random splits over fraction of features (in contrast to RandomForest, which tests all possible splits over fraction of features)

✓ **Correct**

Right, this is why they are called extra (randomized) trees

3. What model was most probably used to produce such decision surface? Color (from white to purple) shows predicted probability for a point to be of class "red". 1 / 1 point



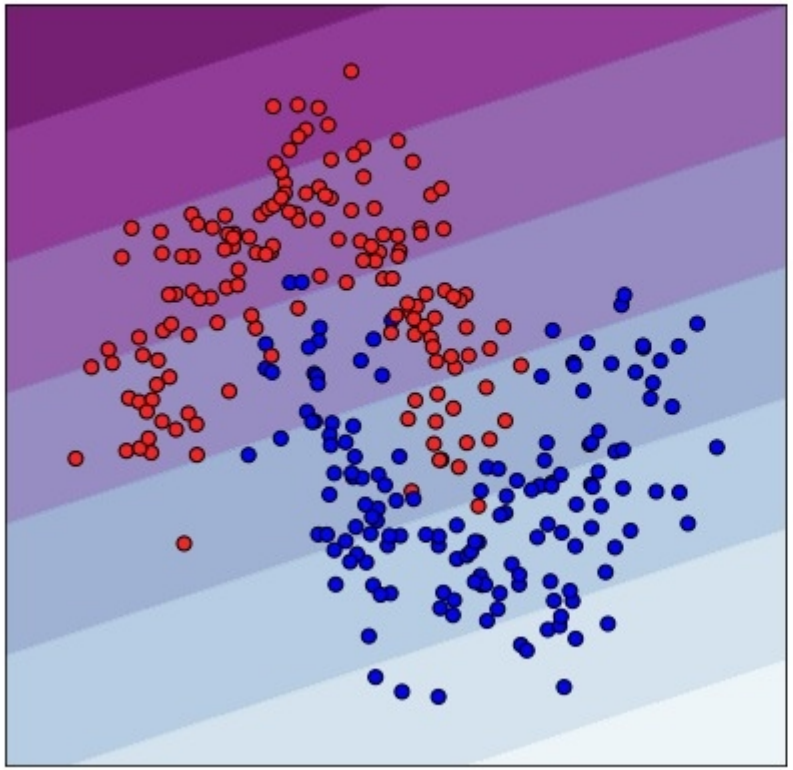
- ○ Linear model
- ○ Random Forest
- ○ Decision Tree
- ◉ kNN

✓ **Correct**

Right. Decision surface is non-linear and does not consist of vertical and horizontal lines, so k-NN is the most plausible option in this list

4. What model was most probably used to produce such decision surface? Color (from white to purple) shows predicted probability for a point to be of class "red".

1 / 1 point



- ○ Decision Tree
- ○ k-NN
- ○ Random Forest
- ◉ Linear model

✓ **Correct**

Right. Decision boundary is hyperplane, so it was most probably produced by a linear model.