1 – Yes. We use ensemble learning.

2 - Hard voting classifier classifies data based on class labels and the weights associated with each classifier. Soft voting classifier classifies data based on the probabilities and the weights associated with each classifier.

3 - **Yes it is possible to speed up the training time of bagging by distributing them on multiple servers** because all of them are independent of each other. Pasting and Random Forest also works similarly.

4 - It requires less computation as it allows one to test the data as it is being trained.

5 -  Random forest uses bootstrap replicas, that is to say, it subsamples the input data with replacement, whereas **Extra Trees use the whole original sample.**

**6 - Try increasing the number of estimators or reducing the regularization hyperparameters of the base estimator, also try slightly increasing the learning rate.**

**7 - Decreasing the learning rate**, early stopping to find the right number of predictors