Week 5 Quiz

Due Feb 22 at 11:59pm **Points** 12 **Questions** 3
Time Limit 20 Minutes **Allowed Attempts** 2

Instructions

instructions.png Instructions

This quiz consists of three questions. To be successful with the module quizzes, it's important to read the assigned chapters, practice exercises, and complete the interactive activities. Keep the following in mind:

- **Attempts:** You will have two attempts for this quiz with your highest score being recorded in the grade book.
- **Timing:** You will need to complete each of your attempts in one sitting, and you are allotted 20 minutes to complete each attempt.
- **Answers:** You may review your answer choices and compare them to the correct answers after your final attempt.

To start, click the "**Take the Quiz**" button. When finished, click the "**Submit Quiz**" button.

Technical Support Technical Support

Need help using Canvas Quizzes? If so, please review the following guide: **Canvas Student Guide - Quizzes (https://community.canvaslms.com/docs/DOC-10701#jive_content_id_Quizzes)**

Take the Quiz Again

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	3 minutes	12 out of 12

Attempt	Time	Score

Score for this attempt: **12** out of 12
Submitted Feb 18 at 6:15pm
This attempt took 3 minutes.

Question 1

4 / 4 pts

Three binary classifiers make the following predictions to an instance X:

Classifier 1 outputs class 1

Classifier 2 outputs class 2

Classifier 3 outputs class 1

Assume we assign the following weights to the classifiers:

Classifier 1: 0.3

Classifier 2: 0.4

Classifier 3: 0.3

Using the weighted majority vote for ensemble learning with the three classifiers, which class will be the final decision?

- ○ Class 2
- ◉ Class 1

Correct!

Question 2

4 / 4 pts

Bagging and pasting are two ensemble methods that generate different weak learners by using the same training algorithm but on different random subsets sampled from the training data. If the sampling is performed with replacement, this method is called

Correct!

- (selected) bagging
- pasting

Question 3

4 / 4 pts

Which of the following statements is true regarding bagging, boosting, and stacking?

- Bagging uses the same training algorithm to produce a diverse set of weak learners for ensemble learning.
- Most boosting methods produce weak learners by training them sequentially, i.e., by correcting the predecessor of each weak learner at each iteration of training.

Correct!

- (selected) All of the above.
- Stacking (a.k.a., stacking generalization) aggregates predictions of weak learners by training a model for aggregation, instead of using trivial functions (such as hard voting).

Quiz Score: **12** out of 12