Review Question 1

(1/1 point)

After being hired by Robert Downey Sr's start-up "SpaceZ", you've been placed in charge of the artificial intelligence that controls the HyperExplorer Pod. This vessel will travel at very fast velocities through the asteroid belt to explore the long-term effects of low-gravity and space-travel on the humans, animals, and plants onboard.

It's important the craft is able to manuever around asteroids safely, but gas clouds aren't as important to avoid (we know gas clouds don't just hang out in space, but work with us here...)

You have around 90-thousand data samples of various space instrument readings stored as features, all of which were collected from earlier satellite launches.

The first item of business you need to take care of is identifying the type of objects the vessel encounters, such as comets, asteroids, aliens, gas clouds, and solar flares.

Which of the following algorithms makes the most sense to use to do this?

- Decision Tree Regression
- Linear Regression

Dive Deeper

- Randomized PCA
- K-Means
- SVC ✔

EXPLANATION

Since the purpose is identifying the type of object, you need to use a classifier. The only classifier on the list is SVC.

You have used 1 of 2 submissions

Review Question 2

(1/1 point)

Given the column definitions: **Alligator**, **Crocodile**, and **Water Snake**, and the following confusion matrix:

3 0 1

4 1 1

0 2 3

Which target is your model doing a really bad job of correctly predicting, and what class does it actually think that target is?

- (•) Crocodile, Alligator ✔
- ( ) Alligator, Crocodile
- ( ) Crocodile, Water Snake
- ( ) Water Snake, Alligator
- ( ) Alligator, Water Snake

You have used 1 of 2 submissions

Review Question 3

(1/1 point)

If all you cared about was how *fast* an algorithm could come up with a decent approximation of how much wool a sheep produces per year given the altitude above sea-level it lives, how much it eats per day, and the amount of day-light hours it receives each month, and the existence (or not) of a few genetic markers...

Which of the following algorithms are you most likely to use?

- Logistic Regression
- Linear Regression ✔
- Boosted Decision Trees Regression
- Isomap
- Neural Networks

EXPLANATION

Linear regression is the fastest algorithm on this list. Most of the other algorithms are used for classification, but boosted decision tree regression in particular is way slower than linear regression, although is offers better accuracy.

You have used 1 of 2 submissions