Review Question

(1/1 point)
Please mark the appropriate response below:

- Decision trees are able to do non-linear classification because the tree branches don't use linear decision surfaces
- Each node of the tree represents the outcome of decision, such as age > 18, leading to an eventual classification
- The decision tree algorithm is able to build a tree based on the intrinsic geometry of your dataset
- **Decision trees do not use kernels, but are capable of doing non-linear classification by segmenting your feature-space.** ✔

EXPLANATION

Dive Deeper

The decision surfaces of a decision tree are linear and its branches, not its nodes, represents the outcome of decisions.

It's not so much the geometry of your dataset as it is its probability. For geometric based algorithms likeisomap / linear regression, etc. if you take anon-symmetric shape and mirror it, it would rsult in different answers, like a negative slope. With a decision tree, you would still get the same classification.

You have used 1 of 2 submissions