

# Adaboost Breakout

Pair up!

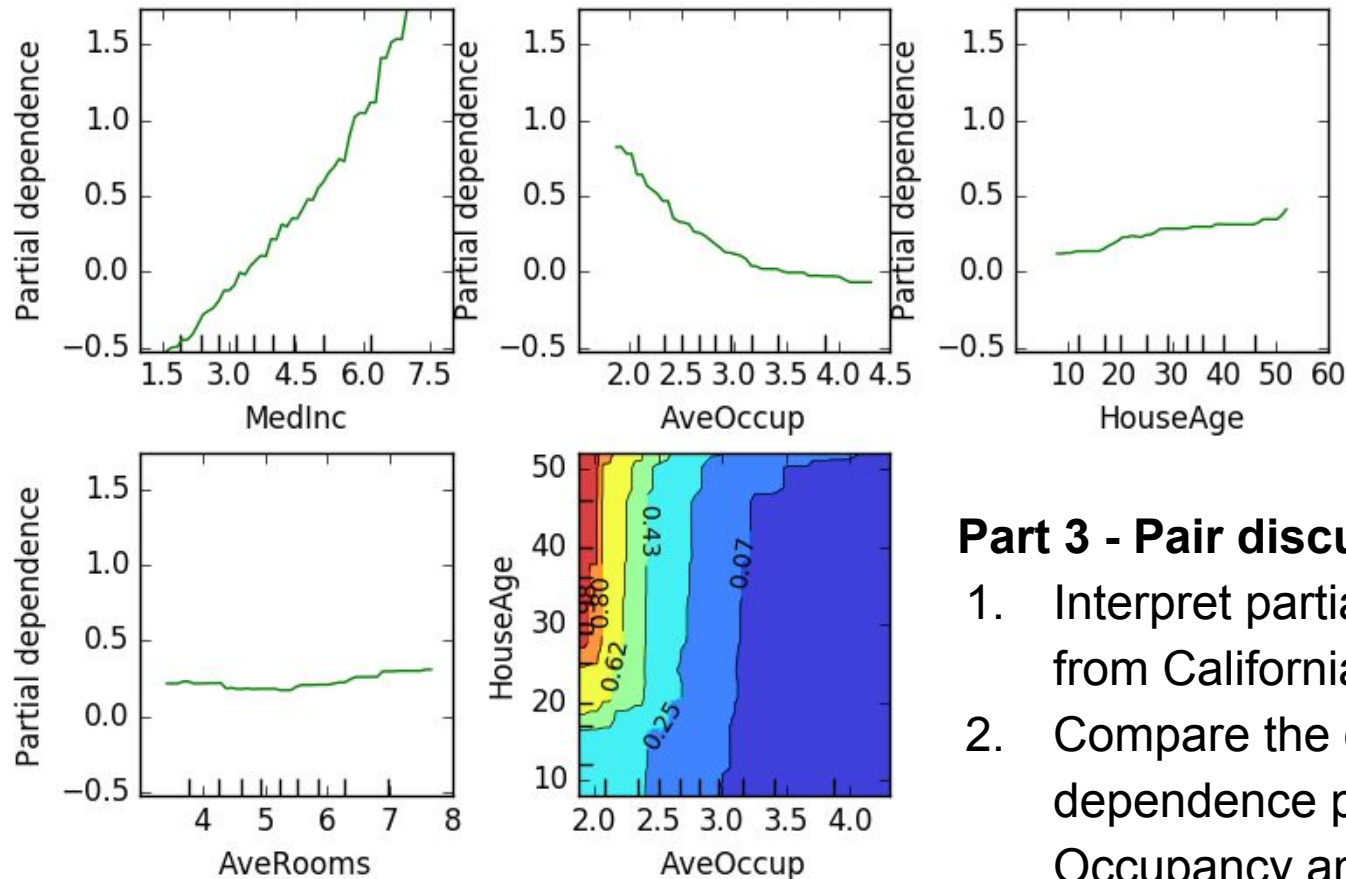
# Part 1: Pair Discussion - fill in the following table

	Random Forest	Gradient Boosting
Is it an ensemble method? Why?		
Describe how the trees are built. Is there a difference between the first tree and subsequent trees, and why?		
Typically, are the trees involved deep or shallow? Comment on the consequences in terms of bias and variance for an individual tree and the ensemble.		
Name and describe some significant hyperparameters.		
Why does this method work?		

## Part 2: Pair Discussion

1. Adaboost is trained on modified versions of the training data.
  - a. How are these modifications applied?
  - b. How do they affect training?

Partial dependence of house value on nonlocation features  
for the California housing dataset



**Target:**  $\log(\text{Median home price of Neighborhood})$

**Features:** Median Income, Average Occupancy, House Age, and Average Rooms

### Part 3 - Pair discussion:

1. Interpret partial dependence plots from California Housing Dataset.
2. Compare the one-way partial dependence plots of Average Occupancy and House Age with their two-way plot.