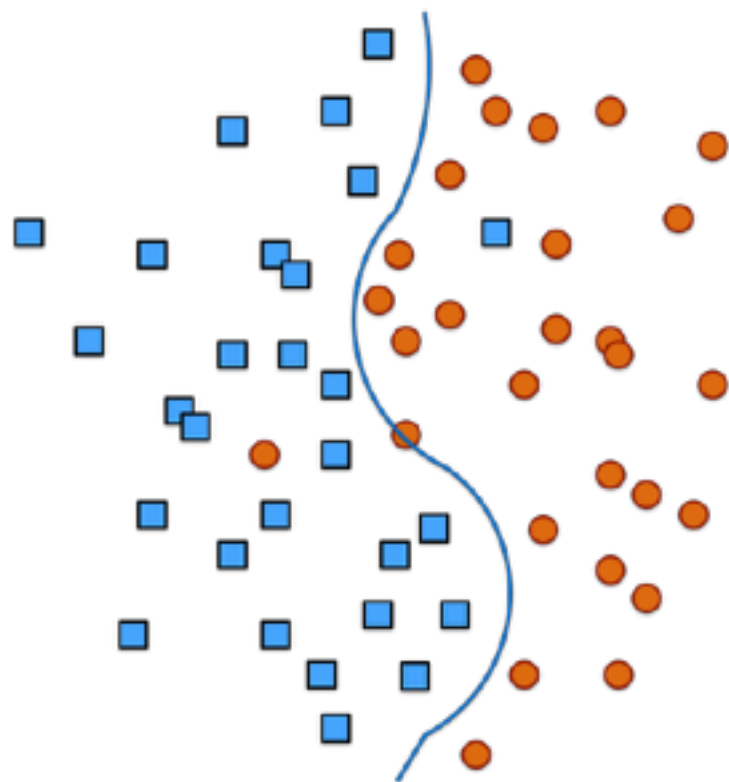




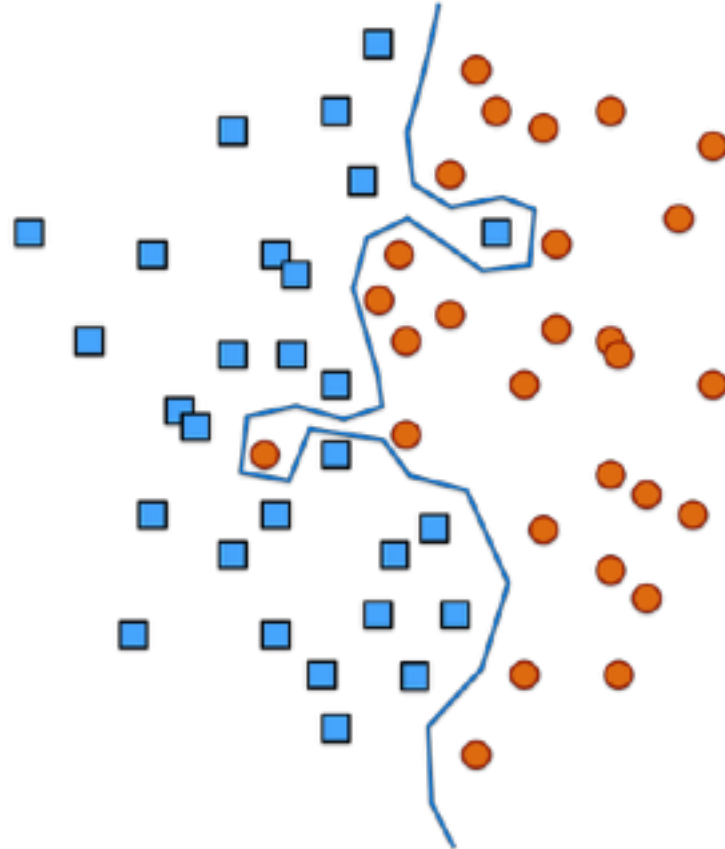
Starting and stopping

- How often should we check our validation error? (Computation time versus generalization)
 - **score_each_iteration**: score model after each tree
 - **score_tree_interval**: score model after n trees
- Setting criteria for stopping
 - **stopping_rounds**: early stop if stopping metric's moving average does not improve for this many rounds
 - **stopping_metric**: metric for early stopping
 - **stopping_tolerance**: Relative tolerance for metric-based stopping criterion (stop if relative improvement is not at least this much)
 - **max_runtime_secs**: maximum runtime to allow for model building

Finding the Signal in the Data



Memorizing the Data



Scoring and Stopping

- How often should we check our validation error? (Computation time versus generalization)
 - **score_each_iteration**: score model after each tree
 - **score_tree_interval**: score model after n trees
- Setting criteria for stopping
 - **stopping_rounds**: early stop if stopping metric's moving average does not improve for this many rounds
 - **stopping_metric**: metric for early stopping
 - **stopping_tolerance**: Relative tolerance for metric-based stopping criterion (stop if relative improvement is not at least this much)
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