# Machine Learning(2016.10.03)

* What makes a good tree?
  + Small
    - Ockham’s razor
    - Simpler is better
    - Avoids over-fitting
  + A decision tree may be human readable, but not use human logic
    - The decision tree you would write for a problem may differ from computer
* Like many NP.complete problems we can get pretty good solutions
* Most decision tree learning is by greedy algorithms
  + Adjustments are usually to fix greedy selection problems
* Top down decision tree learning
  + Recursive algorithms
* The best feature for splitting
  + The most informative feature
  + Select the feature that is most informative about the labels