

1. Decision tree and decision list

1.1. Decision tree

Def is a flowchart-like structure in which each node represents “test” on a feature(classification rule), each branch represents outcome of the “test node”, each leaf represents resulting class.

Not good at extrapolation.

1.2. Decision list(ordered list of decision rules)

Def the list of Boolean functions which can be easily learnable from examples.

if f_1 then b_1 else if f_2 then b_2 ...

Harder to present understandable hierarchical structure, because match must return a prediction. Easy to add rules.

1.3. Which to use

Decision tree with configuration can imitate decision list and also provide hierarchical structures(easier to understand and compute)