



## LIST CLASSIFIERS

### Why

A classifier predict one value, for which reason it is sometimes called a *point classifier* or *point predictor*. A natural extension is to ask for an ordered list of classifications.

### Definition

A *list classifier* is a function from an input to a list of outputs. For example, if our classifier maps to lists of length three, we may interpret the elements of the list as the classifier's top, second and third ranked guesses.

For an example application, consider a recommendation system. The input is a user query and the output is a list of ordered guesses.

### Nearest-neighbor list classifier



