

Concept Learning

Problem of searching through a predefined space of potential hypotheses for the hypothesis that fits the data best.

- Each constraint can be
 - a value (water = warm)
 - don't care (water = "?")
 - no value allowed (water = "∅")

? : Feature has no predictive power. (almost redundant)

★ We're looking for a conjunction of constraints that describe (+) examples the best.

★ most general hypothesis → $\langle ?, ?, ?, ?, ?, ? \rangle$

Every day (instance) is a positive example, can't do classification

most specific hypothesis → $\langle \emptyset, \emptyset, \emptyset, \emptyset, \emptyset, \emptyset \rangle$

No day (instance) is positive example

- Try to induce general functions from specific training examples.