08.09.24
Friday

Refer to Sheet [18.3 pg 713]

hypothesis } → consistent.
Example } Same Result

hypothesis } Different — Inconsistence
Example }

('e' or drop')

generalization

↑

→ false Negative

→ false positive

↓

specialization

(Include 'AND'
(Operator

(1) Current best hypothesis

(2) Least commitment search

$h_1 : \forall n \left[\underset{T}{\text{willwait}}(n) \longleftrightarrow \underset{T}{\text{Alternate}}(n) \right] / T$

willwait	Alternate	willwait ⟷ Alternate
T	T	T
T	F	F
F	T	F
F	F	T

check x_2, Alt is yes, but goal wait - No

∴ false positive

h_2 : $\forall n$ [willwait (n) $\leftrightarrow$ Alternate (n) $\wedge$
F Patrons (n, Some)]
(T / F)

check x_3

∴ false Negative. $\longrightarrow$ Generalization.

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h_3 : $\forall n$ willwait (n) $\leftrightarrow$ patrons (n, Some)
F / F

Check x_4, its actual positive. but hypothesis h_3 evaluate to negative

h_4 : $\forall n$ willwait (n) $\leftrightarrow$ Patrons (n, Some)
$\vee$ (Patrons (n, full) $\wedge$ Fri (n)).

h_4': $\forall n$ [waitwait(n) $\longleftrightarrow$ Twait-Estimate(n, 30-60)

h_4'': $\forall n$ [waitwait(n) $\longleftrightarrow$ Patrons(n, some) $\vee$

(Patrons(n, full) $\wedge$ waitEstimate(n, 10-30))]

$[h_4 \vee h_4' \vee h_4'']$ negation

$h_4 \vee h_4''$