

The proposition A is concluded by two rules, as follows;

$$A \xleftarrow{w_1} B, C \quad (A \text{ if } B \text{ and } C)$$

$$A \xleftarrow{w_2} D, E$$

There are weights associated with each rule concluding A . Such weights are used in the attenuator function for each rule.

You need an integrator function to assign a belief (certainty factor) to, e.g. A , from the beliefs assigned to A by each rule.

You need a combinator function to assign a belief to

the premise of a rule from the individual propositions (B, C) that make up the premise.
of a, b

Prob. sum_n is defined as $a + b - ab = a \oplus b$

An event space is a set of events s.t.

- Ω is an event (Ω is the ^{whole} sample space)
- if E_1 and E_2 are events, then $E_1 \cup E_2$ is an event
- if E is an event, then $\overline{E}$ (the complement of E , i.e., $\Omega \setminus E$) is also an event.

An event is a subset of the sample space (Ω).

Ex.: $\Omega = \{1, 2, 3, 4, 5, 6\}$ (sides of a die)

$\mathcal{E} = \{ \{1, 2, 3, 4, 5, 6\}, \{\}, \{1, 3, 5\}, \{2, 4, 6\} \}$