

Deductive Databases & Knowledge Based Systems

Sheet 9

Exercise 1

1. What is the base idea of the certainty factors approach?
2. Briefly explain (aka simple and short without formulas) how belief, disbelief and certainty factors are related. What do they mean? How do they relate to probability theory?
3. Why seemed using a probabilistic approach a bad idea for MYCIN?

Exercise 2

1. What is a linguistic variable and why is it useful?
2. What is fuzzyfication and defuzzification?
3. What is a hedge and why is it useful?
4. Do you think that fuzzy reasoning is well suited for longer reasoning chains? Explain (very) briefly.

Exercise 3

Try to answer **briefly**, precisely and understandable.

1. What is the main idea of CBR?
2. Briefly explain the 4-phase model.