Expert Systems – exercises 1

Return your solutions and first week learning diary in paper format in the next lecture 21.9. 2005.

- 1. Read some articles on the newest applications of expert systems on page http://www.aaai.org/AITopics/newstopics/expert.html
 What do you think is the most interesting application? Describe one system carefully.
- 2. Try some on-line expert system. You can find several free expert systems in the internet. (For example, check under page http://www.uky.edu/BusinessEconomics/dssakba/instmat.htm#Expert%20Systems%20&%20Artificial%20Intelligence). Tell which system you tried, did it work, and how it was implemented (if you cannot find out, you can guess the main principle).
- 3. Construct a simple rule-based system for students, who are deciding whether to go to a morning lecture or not. The decision can be based on any factors you consider relevant, e.g. weather, distance from university, time, how important the lecture is, how difficult the course is, whether the student had skipped the last lecture, etc. You can express the system as a set of "if-then"-rules or as a decision tree.
- 4. Search Machine Learning data repository http://www.ics.uci.edu/~mlearn/MLRepository.html for interesting data sets. In what kind of expert system could you use the data?