

Assignment 2

Assignment 2.1

Copy the genetic rule induction algorithm GA32 and the PATIENTS files (i.e. PATIENTS.NAM, PATIENTS.DAT and PATIENTS.TES) and use the GA32 example session document to become familiar with the GA32 rule mining tool.

Assignment 2.2

Perform a series of experiments with different *minimal-covering* parameters (200, 100, 50, 25, 10, 5, 2, and 1). Make a graphical representation of the performance on the learn and test material and explain your results.

Assignment 2.3

Compare the rules of the Alpha Miner (default setting) with the rules of the GA32 miner (default settings). Discuss the differences and similarities'.

Assignment 2.4

Describe the experimental setup you need to draw a conclusion about a better learning performance with respect to the patient classification tasks of the Alpha Miner rule induction approach or with GA32 approach.

Assignment 2.5

The rules of GA32 approach are ordered. If the rules are used for the classification of a new case, you first try if the first rule applies. Only, if the first rule thus not applies, you try the second rule, etc. What do you think, is this an advantage or a disadvantage?