NEMIK

Nemik is a software which allows to analyze output data processed by *Transform.exe*, to classify data and simulate games with an artificial player.





TASK 1: Observing experimental players strategies

1. Choose Open command from File menu to load rough data. Input Data must be arranged in the Linear form as follows:

3H 2C 2H 4C 4H 3C

TUDT	20	-11	чС	211	511
3H	3C	2н	2C	4C	4н
PUPT					
ЗH	2Н	2C	4C	4H	3C
					•••

- 2. Data can be visualized on the right-hand side:
 - a. the number in the box under N corresponds to the hand visualized;
 - b. cards lay-out shows in the box on the right.

Such a lay-out is also displayed in the left-hand side, with cards showing directly. The large box on the right-side contains the moves, each line reporting a player's moves.

3. Click the blue arrow downwards to pass from hand to another and see how another hand has been played.

TASK 2: Observing how a player played his game

- 1. Select a player in the right-hand side, double-clicking the lines corresponding to the moves
- 2. The moves will display in the lower left-hand, meaning that we are analyzing exactly the moves showing.
- 3. Clicking the Forward button (>), cards and moves become highlighted in blue, and you shift to the following move



TASK 3: Classifying hands

The hands can be classified according to game style 422, 442 (see Appendix).

- 1. Choose Open from File command to load the rough data
- 2. Choose Classifier from Analysis command to classify hands. The classified data are recorded in the file Amik.doc
- 3. Amik.doc can be loaded to Excel: this allows to carry on a number of analysis (e.g.: counting the hands played according to a given style; counting the solving rate time, work out charts showing the frequency of different game styles respect to the optimum game...)

TASK 4: Artificial Hand Play

1. Choose Open command from File menu to load the hands to play;

- 2. Choose Rules command from File menu to load the rules which Artificial Player will apply
 - a. Rules file must be selected for both *CK* and *NK*
 - b. Press OK once accomplished these steps
- 3. "Artificial Player" command (above the tableau) enables the programme to play the ongoing hand, and visualises the output in the lower left-hand space (below the tableau), that is shows how the software has played applying the rules set
- 4. Choose Artificial from Analysis menu to play all the hands loaded according to the rules set
 - a. Set the number of iterations, that is how many times the software will play the same hand
 - b. The output of the Artificial Player is recorded in the Automa.txt file
 - c. Automa.txt can be loaded to Excel to carry out data analysis