Gelisp 1.0: A Graphical interface for OpenMusic

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1 Introduction

Process calculi have been applied to the modeling of interactive music systems (27; 23; 28; 22; 34; 25; 26; 21; 24; 20; 33; 39; 19; 38; 1; 35; 29; 5; 17; 14; 16; 18; 2; 32; 15; 30; 31; 13) and ecological systems (36; 7; 37; 8). In addition, research on algorithms (6; 4; 11; 9; 10) and software engineering (12; 3) also contributes to this field.

2 Special Boxes

2.1 OMCSP Box

This box is used to define a CSP and its heuristics.

Figure 1: OMCsp Box

2.2 Output Box

This box is used to define the variables to observe in a CSP.

2.3 Optimal-criterion Box

This box is used to define the variable corresponding to the optimal-criterion in the search (optional).

2.4 Create-interger-vars Box

This box is used to define a list of finite domain variables.

Figure 2: Output Box

Figure 3: Optimal-criterion Box

Figure 4: Create-interger-vars Box

2.5 Constraint Box

This box is used to connect each constraint box in the patch.

Figure 5: Constraint Box

2.6 Timelimit Box

Using this box we can setup a time limit for the search.

Figure 6: Timelimit Box

2.7 Constraint Box

This box is used to connect each constraint box in the patch.

3 Constraint Boxes

3.1 forall $x_i + n_i \neq x_j + n_j$ Box

This is a variation of the all-distinct constraint.

Figure 7: Constraint Box

Figure 8: forall $x_i + n_i \neq x_j + n_j$ Box

3.2 Motives-occurs= $\leq$, $>$, $\geq$ Box

These methods are used to post a constraint about the occurrences of each element in a list of motives in a list of variables.

3.3 Geliss= $\leq$, $>$, $\geq$ Box

These methods are used to post a relational constraint about a finite domain variable (e.g., $a = 2$) or two fd variables (e.g., $a < b$).

3.4 Memberof Box

4 Search Boxes

4.1 Omsearch-next Box

This method search the next solution. If you want to find different solutions, block the omcsp box.

Figure 9: Motives-occurs=, <=, >, >= Boxes

Figure 10: Gelisp=, <=, >, >= Boxes

Figure 11: Memberof Box

Figure 12: om-search-next Box

4.2 Omsearch-all Box

This method search the all the solutions.

Figure 13: om-search-next Box

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