CSCE 580 Fall 2003

GRADUATE STUDENT PROJECTS

Assigned Friday, 20030321. Due Wednesday, 20030416

1. Implement a simple theorem prover for propositional logic in clausal form using the Loveland and Stickel techniques described in class, i.e. by extending Prolog with the addition of contrapositive and ancestor contradiction checking.
2. Find and install a constraint logic programming system. Try it on the scheduler of Figure 14.4
3. Implement a simple rule-based system shell as described in Sections 15.1 to 15.4 of Bratko's book.
4. (Uninformed AND/OR Graph Search) Do exercises 13.1, 13.2, and 13.3 [B].
5. (Inductive Logic Programming) Do exercises 19.1, 19.2, 19.3 in [B].
6. (Qualitative Reasoning) Implement the program of figure 20.8 and try it out (by obtaining behaviors) on the qualitative models of figure 20.9 and 20.10.