

# CS 4649/7649: RIP - Robot Intelligence - Planning

## PROJECT 1: CLASSICAL SOKOBAN PLANNER

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### 1 Pre-Project: Towers of Hanoi

#### Planners Used

The two classical planners which we are using for the Towers of Hanoi problem are the Blackbox planner [1] (downloaded from <http://www.cs.rochester.edu/~kautz/satplan/blackbox/blackbox-download.html>) and the FF planner [2] (downloaded from <http://fai.cs.uni-saarland.de/hoffmann/ff/FF-v2.3.tgz>). The definition of the Towers of Hanoi domain, as well as the representation of the initial state of the problem (from Figure 1) are in the corresponding PDDL files, namely *hanoi-domain.pddl* and *hanoi-3.pddl*.



Figure 1: Towers of Hanoi with 3 disks

#### References

- [1] Henry Kautz and Bart Selman. Blackbox: A new approach to the application of theorem proving to problem solving. In *AIPS98 Workshop on Planning as Combinatorial Search*, volume 58260, pages 58–60, 1998.
- [2] J. Hoffmann. The fast-forward planning system. *AI magazine*, 22(3), 2001.