University of Denver COMP 3501 Introduction to Artificial Intelligence Extra Credit Due May 30, 2014

2048 is a popular single-agent game where tiles are combined together to make successively large tiles by "swiping" the current tiles in one of the four possible directions.

Build an agent that can play 2048 (<u>http://gabrielecirulli.github.io/2048/</u>) successfully, regularly achieving a score of 2048, and often much higher.

Assume that new tiles appear randomly, and that they have a 10% chance of being a 4 and a 90% chance of being a 2.

You do not need to make a graphic interface for the program, but some sort of interface will be useful to verify that the program is working correctly and to show it off to others. Depending on the number of programs which are completed, we may have a simple competition to see which program can get the highest score.

Turn in via e-mail to the instructor and TA: A short write-up describing (1) how your program works (2) the top scores reached by your program in 5 consecutive runs and (3) how you think you might be able to improve your program. Also include the source code to your program.

The assignment will give up to 5% extra credit for your final course grade.