

# Extra Credit EC5: Passive Reinforcement Learning

*CS 4300*  
*Fall 2015*

**Assigned:** 12 November 2015

**Due:** 10 December 2015

For this problem, handin a lab report pdf (include name, date, assignment and class number in pdf) which implements the passive reinforcement algorithm to learn the utilities of the policy shown on p. 832 in the text. You should produce plots like those shown in Figure 21.3, p. 835 in the text. Plot utility estimate traces for all cells. You should describe your passive RL algorithm in the method section and verify its correctness.

You should handin the report pdf as well as the Matlab code used in the study. The code should conform to the style requested in the class materials (no matter what language).

In addition, please turn in a hardcopy of the report in class before the start of class on December 10, 2015.

Write a lab report in the format (please do not deviate from this format!) described in the course materials.

Discuss the statistical framework to establish a confidence interval on the means, and the hypothesis test.