

Assignment A2: Agent Brains

CS 6380
Spring 2020

Assigned: 21 January 2020

Due: 6 February 2020

For this problem, handin a lab report pdf (include name, date, assignment and class number in pdf) which studies statistics for a variety of agent behaviors. The report will be developed as a team effort in Overleaf, but you must handin the Matlab code developed in the study. The code should conform to the style requested in the class materials.

The lab report will be in the format described in the course materials. Discuss the statistical framework to establish a confidence interval on the means, and the hypothesis test for your work. Please turn in your work before the start of class on February 6, 2020 (A2).

Behaviors to be studied include (but may not be limited to!) the following:

- random movement
- random movement and gold retrieval
 - random movement
 - detect gold
 - pickup gold
 - take gold to [0;0]
 - drop gold
- Boundary finder

- Map Full Environment (Boundary and rectangles)
- Find gold and map environment

For all these behaviors, measurements will be made in terms of percentage gold retrieved, and percentage of line segments mapped. In addition, single and multiagent scenarios will be compared.