

Lab 4 – Potential Fields Post-lab Worksheet

1. Describe and explain (give reasons for) the behavior of the robot when it could sense multiple obstacles.
2. Describe and explain (give reasons for) the behavior of the robot when it could sense one or more obstacles and a goal was present.
3. Which magnitude profile performed better overall? Provide specific examples of the observed behavior to support your answer.

4. Would it be possible to create a wall-following behavior using only the fields provided in the lab? Explain your answer.

5. List some advantages of the potential fields approach as demonstrated in this lab.

6. List some disadvantages of the potential fields approach as demonstrated in this lab.