

Heuristics

Algorithm 1: Heuristic Algorithms

```

begin
    /* For angle-dependent path heuristic
    algorithm.                                     */
    if  $angle = \pi$  or  $angle = 0$  then  $likelihood = 0$ 

    else if  $angle < \pi$  then
         $likelihood = \cos(angle - 0.25 \cdot \pi)$ 

    else if  $angle > \pi$  then
         $likelihood = \cos(2 \cdot ((2 \cdot \pi - angle) - 0.25 \cdot \pi)/3)$ 

    /* For distance-dependent path
    heuristic algorithm.                             */
    if  $distance < minDistance$  then  $likelihood = 0$ 

    else if  $minDistance < distance < mDistance$  then
         $likelihood = 0.4 \cdot (distance - minDistance)$ 

    else if  $mDistance < distance < maxDistance$  then
         $likelihood = (distance - minDistance)$ 

    else if  $distance > maxDistance$  then
         $likelihood = 0.8 \cdot (distance - minDistance)$ 

end

```
