

1 Run Dijkstra on a pretend SLAM map

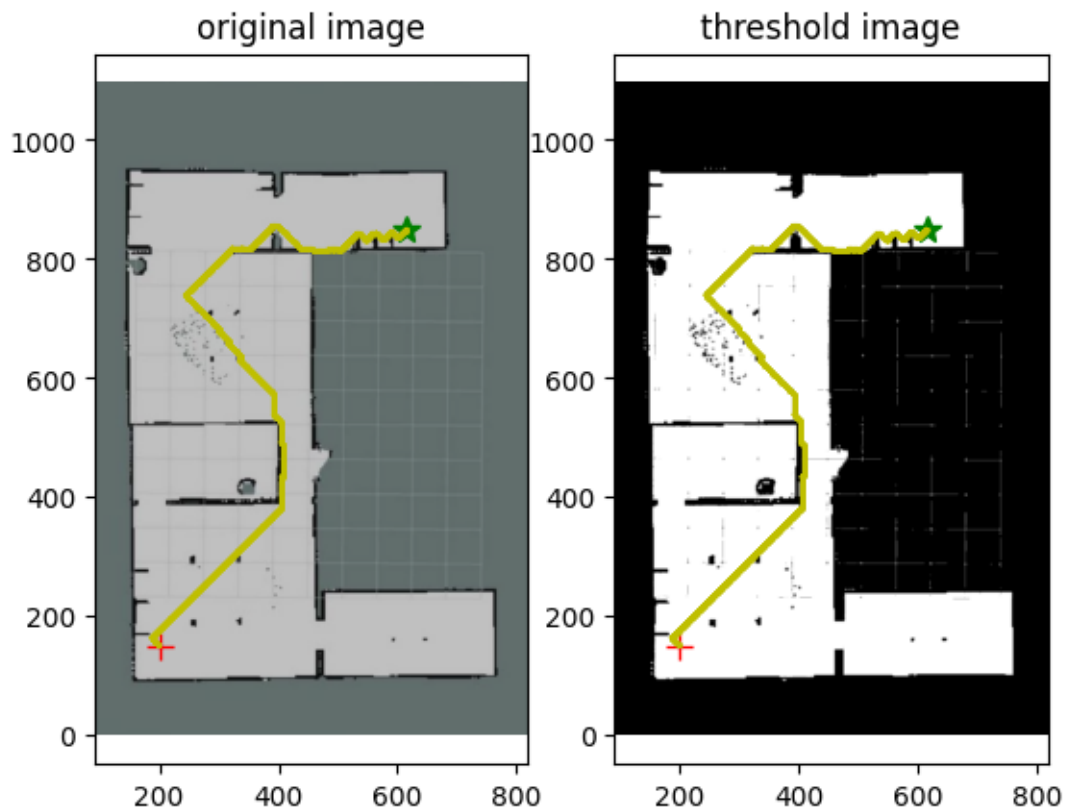
```
In [4]: from path_planning import convert_image, dijkstra, plot_with_path, open_image
```

```
In [5]: # Opens and threshold the SLAM map image
im, im_thresh = open_image("SLAM_map.png")

robot_start_loc = (200, 150)
# Closer one to try - change this after it works...
# robot_goal_loc = (315, 250)
robot_goal_loc = (615, 850)
zoom = 0.8

"""
print(f"Image shape {im_thresh.shape}")
for i in range(0, im_thresh.shape[1]-1):
    for j in range(0, im_thresh.shape[0]-1):
        if is_free(im_thresh, (i, j)):
            print(f"Free {i} {j}")
"""

path = dijkstra(im_thresh, robot_start_loc, robot_goal_loc)
plot_with_path(im, im_thresh, zoom=zoom, robot_loc=robot_start_loc, goal_loc=robot_goal_loc, pa
```



```
In [6]: # Opens and threshold a real SLAM map image
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```
im, im_thresh = open_image("map.pgm")
```

```
robot_start_loc = (1940, 1953)
```

```
robot_goal_loc = (2135, 2045)
```

```
zoom = 0.1
```

```
path = dijkstra(im_thresh, robot_start_loc, robot_goal_loc)
```

```
plot_with_path(im, im_thresh, zoom=zoom, robot_loc=robot_start_loc, goal_loc=robot_goal_loc, pa
```

