

**Task 2 - Image Processing and Path Planning
(Cross a Crater)**

Please find following folders within the folder that contains this Read Me file.

1. **Experiment:** Please find the **Task2_Description.pdf** file in this folder. This file contains a description of the task and the problem statement.

In this folder you will also find:

- **imgLib** and **task2-main** python files you to edit and modify
NOTE: Please open and read the comments in these files carefully and follow the instructions as given in the comments. Do NOT edit the code wherever mentioned in the comments.
- **task2sets:** this folder comprises of 7 test images containing randomly generated 14x14 grids having "1"s and "0"s for checking the effectiveness of your code
- **digits:** this folder comprises of image templates for digit "1" and "0" as a resource
- **outputs:** this folder will store the output images after you run your code
- Three files: **grid_map_solution**, **route_length_solution** and **route_path_solution** for you to verify your solution

Submission Instructions:

The teams must upload their solutions as follows:

- Please save the modified codes **task2-main.py** and **imgLib.py** in the same folder it is already present in i.e. Experiment.
NOTE: DO NOT rename any file or function in the python files
- Experiment folder should also contain an **outputs** folder which will store the output image files after you successfully run your code.
- Copy the Experiment folder into a new folder and name that folder **Task_2**.
- Finally, compress **Task_2** folder in zip format. Upload the **Task_2.zip** as per instructions on the Portal Interface
- The deadline for uploading the solutions to Task 2 is given on portal.

Warning:

- **IMPORTANT:** The document you submit should be YOUR work in YOUR WORDS. To avoid any copyright violations, you must NOT copy phrases directly from manuals or web.
- The team should NOT mail or upload the document anywhere else, except on the portal.
- Teams failing to submit the document by the deadline will lose the marks for this task.

- e-Yantra WILL NOT entertain any request for extension of deadline for uploading the task.
- e-Yantra holds complete discretion to disqualify a team if any foul play is suspected.

Note: Check that you have downloaded the correct folder. After extracting the zip file, check the name of the folder. In case you have received incorrect theme, write to us at helpdesk@e-yantra.org or submit a query on piazza forum.

