# Robotics Competition 2016



# Read Me – Task 1

The objective of this task is to help understand the use of image processing to interpret the given image to find useful information.

The task is divided into 3 parts:-

## **Section-1**

Please find the **Section-1 folder** inside the **Task1\_Practice folder**. Inside the **Section-1 folder** the following files are present:

- 10 Maze test images "maze00.jpg" to "maze09.jpg"
- Section1.py python file
- Section1.txt text file
- Hash.txt text file
- TestSuite\_1.py python file
- Task1\_Section1\_Description.pdf document file.

Please refer to the *Task1\_Section1\_Description.pdf* for instructions on how to complete Section-1 of this task. You are expected to understand the problem and use image processing to find a solution. For the solution you need to edit the *section1.py* file and add your own code. You are **not allowed** to change or tamper with any other file in the **Section-1 folder**.

## **Section-2**

Please find the Section-2 folder inside the Task1\_Practice folder. Inside the Section-2 folder the following files are present:

- 10 Maze test images "maze00.jpg" to "maze09.jpg"
- Section2.py python file
- Section2.txt text file
- Hash.txt text file
- TestSuite\_2.py python file
- Task1\_Section2\_Description.pdf document file.

Please refer to the *Task1\_Section2\_Description.pdf* for instructions on how to complete Section-2 of this task. For the solution you need to edit the *section2.py* file and add your own code. You are **not allowed** to change or tamper with any other file in the **Section-2 folder**.

## **Section-3**

Please find the **Section-3 folder** inside the **Task1\_Practice folder**. Inside the **Section-3 folder** the following files are present:

- 10 Maze test images "maze00.jpg" to "maze09.jpg"
- Section3.py python file
- Section3.txt text file
- Hash.txt text file
- TestSuite\_3.py python file
- Task1\_Section3\_Description.pdf document file.

Please refer to the *Task1\_Section3\_Description.pdf* for instructions on how to complete Section-2 of this task. For the solution you need to edit the *section3.py* file and add your own code. You are **not allowed** to change or tamper with any other file in the **Section-3 folder**.





# **Submission Instructions**

The teams are expected to upload the solutions for Task 1 as follows:-

- Please save the modified *section1.py*, *section2.py* and *section3.py* files in their respective folders. Please make sure that you have run the respective test suites for each of the 3 sections as instructed in the corresponding description files. The test suites must run without errors.
- Rename the Task1\_Practice folder to eYRC-NT#<Team-id>\_Task1\_Practice. Compress the folder in zip format.
- Upload the zip folder in the Task 1 upload tab on the portal.

