

Road Signs

Participants work in pairs to guide the robot around a track using 'Road Signs', which is designed to introduce participants to Optical Character Recognition.

Tools:

- Tape (or some other means of marking a track)
- 4x Road Signs ('MOVE', 'STOP', 'LEFT' and 'RIGHT')
- 2x Smartphone
- Robot Platform

Setup:

Make the signs prior to completing the activity. The signs should be printed on the computer and pasted onto a sheet of cardboard. Double sided signs can save on resources.

Mark out the track beforehand to save time. The track should consist of a start and end point, contain at least one or two turns, and where possible should cover areas of low light to better demonstrate OCR conditions.

Method:

Step 1: Explain the premise of the narrative. This can be modified to better suit your needs however the basic concept is that the group has been commissioned to test a new form of input, 'Road Signs'.

Step 2: Encourage the participants to form pairs. If there is an odd number of participants you may pair up with the remaining participant or form a group of three.

Step 3: Explain the goal to the participants; to work together to guide the robot from point A to point B, while keeping an eye out for potential issues and improvements.

Step 4: Set the robot at point A if it is not already there and begin the activity. Encourage the participants to try and complete the activity quickly, however the focus should be on accuracy rather than speed. You may reset the robot back on the track if it strays too far away at any point.

Step 5: Once a participant successfully guides the robot to point B, they should be made to swap roles with their partner and repeat the activity.

Step 6: Encourage participants to ask any questions throughout the activity.

Step 7: Continue the activity until every participant has had at least one turn of both roles.