Your visual system makes extensive use of information about the scene and semantic knowledge for facilitating object search in natural scenes. This study examines at the effect of how the scene context can help guide your attention to the target in a visual search task.

In this study, your task was to locate the green turtle. You were told that turtles only appeared in the sea, while tortoises only appeared on the beach. This contextual knowledge should guide your attention to the sea when searching for the turtle. In addition, both types of distractors were presented in different numbers throughout the experiment. By looking at whether increasing distractor objects that are in the irrelevant region (tortoises on the beach) affects your search performance, we can examine whether you can guide your attention to relevant regions based on your contextual knowledge. If you can successfully guide your attention to the sea and ignore the beach, your reaction time would not be affected by the number of tortoises on the beach. If not, then your reaction time would increase as more tortoises appear on the beach, even though they are not in the relevant region!

Your participation is valuable in helping us understand visual search processes. This has important implications for tasks such as doctors searching for tumors and fractures in x-rays, or TSA agents searching for prohibited items in luggage. Thank you! If you have any questions or concerns about this experiment, please contact Gavin Ng (jng17@illinois.edu).

Your visual system makes extensive use of information about the scene and semantic knowledge for facilitating object search in natural scenes. This study examines at the effect of how the scene context can help guide your attention to the target in a visual search task.

In this study, your task was to locate the green turtle. You were told that turtles only appeared in the sea, while tortoises only appeared on the beach. This contextual knowledge should guide your attention to the sea when searching for the turtle. In addition, both types of distractors were presented in different numbers throughout the experiment. By looking at whether increasing distractor objects that are in the irrelevant region (tortoises on the beach) affects your search performance, we can examine whether you can guide your attention to relevant regions based on your contextual knowledge. If you can successfully guide your attention to the sea and ignore the beach, your reaction time would not be affected by the number of tortoises on the beach. If not, then your reaction time would increase as more tortoises appear on the beach, even though they are not in the relevant region!

Your participation is valuable in helping us understand visual search processes. This has important implications for tasks such as doctors searching for tumors and fractures in x-rays, or TSA agents searching for prohibited items in luggage. Thank you! If you have any questions or concerns about this experiment, please contact Gavin Ng (jng17@illinois.edu).