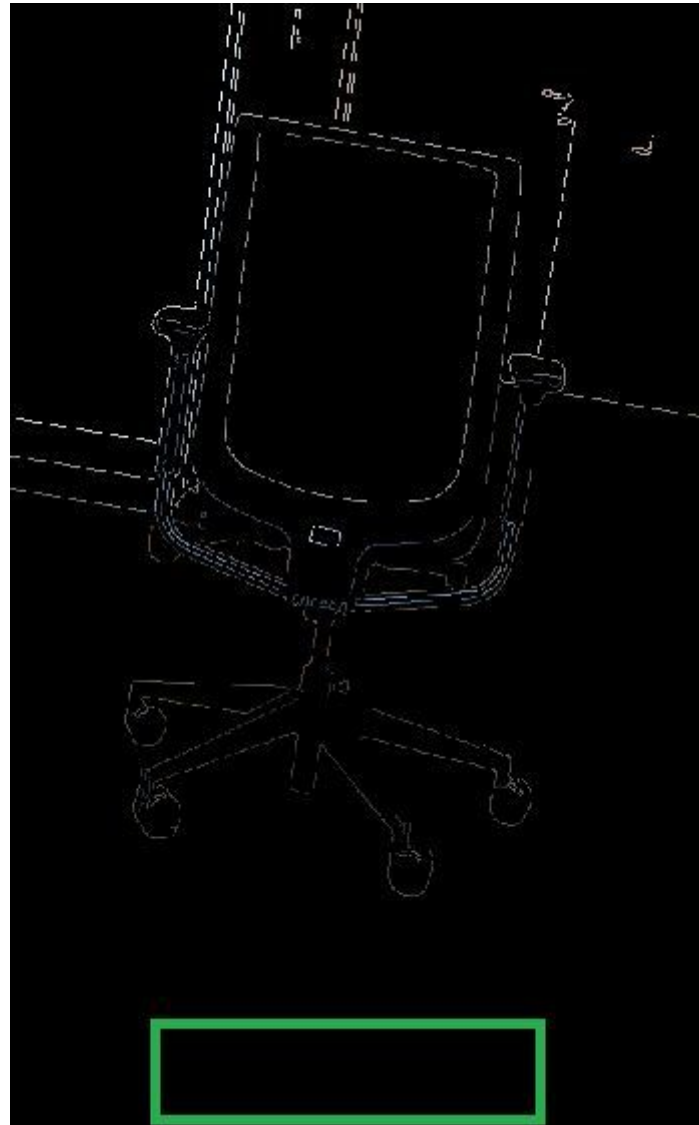


This document gathers images that illustrate the functionality of obstacle detection to aid visually impaired people on indoor locomotion. This relies on having an homogeneous floor (without images or colour change, which is often the case) . More specifically the software interprets the video of someone walking (as viewed by the belly of the person) and warns in case of a obstacle detection.

The next image is an example of a common walking view. There is a chair in sight and once the chair (described by the white contour) reaches the green rectangle it means that there is a obstacle in sight.



For a better understanding of how this works, the next image shows a photo of me (Victor Lamarca, as seen by the contour filter) and the next image contains a matrix of 1's and 0's, in which the 1's describe the contours. Such matrix makes it clear of how the software detects an obstacle (by detecting a certain percentage of 1's in the lower part of the video, which is the green rectangle above)

