Ex2 203200480 320521461

1. The constant brightness assumption assumes that the intensity values of the pixel (which corresponds to a certain object in the image) does not change due to time and place changes.

We use this assumption in the LK objective function that we want to minimize when trying to find the movement vectors in order to fit the image sliding windows between the 2 images. Meaning that if we could compute the Translation\2D Affine\ Projective vectors we expect that the outcome of the subtraction between the 2 corresponding windows should be 0 under this assumption.

This assumption does not git the real world since in reality the brightness might change.

For example, while following a road at night that is lit by street lights the illumination changes whenever we move out of one street light and get closer to the other.