

Visual Computing Lab 3
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Question 1 - Is Otsu's method successful in thresholding all the images?

The thresholding is successful for motorway.png, but **not** for glaucoma.jpg, optic nerve head.jpg and fundus.tif. Though, regarding the aim of each threshold from the 'readme' file in the images folder, the optic nerve head.jpg reaches the aim of processing, by outlining the large, slightly bright area and the smaller brighter area inside it.

Question 2 - How would you modify the thresholding algorithm to address any problems?

We can address a big number of problems by applying adaptive threshold to the image using a filter, for example Gaussian filter to fix the lighting and noise of the image and get a clearer threshold with the Otsu algorithm.

Question 3 - What metrics are there for assessing the success of thresholding?

To assess the success of the thresholding we would need an accuracy. To get this accuracy we need to get the number of correctly thresholded pixels divided by the number of pixels in the image. This would give us a metric to see the success of the thresholding.