

Exercise 1

Advanced Methods in Medical Image Analysis, Julia Wolleb

Deadline: 04.03.2024

Exercise 1: Otsu

- Implement Otsu's method for finding the optimal threshold by minimizing intra-class variance or, equivalently, maximizing inter-class variance. Follow the code snippet *otsu.py* and apply it to the given sample images *whale.png* and *brain.png*.
- Plot the histogram and the curves for the intra-class variance and the inter-class variance.
- Report the resulting threshold value.
- Plot the thresholded images.
- Hand in your code, which does not throw exceptions.



Figure 1: whale

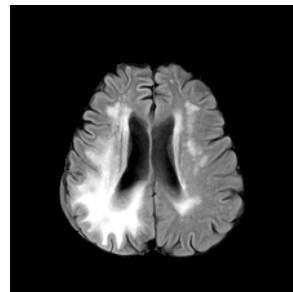


Figure 2: brain