

Write a program with Graphical User Interface (GUI) to implement all segmentation techniques studied in the literature (as described in the slides).

Your program should provide the following functionalities:

- Open an image
- Convert the image to gray-scale
- Apply all segmentation filters and techniques
- Implement a user-defined filter, allowing the user to design his own filter by specifying the size and coefficients. Then, apply it on the input image.
- Export the enhanced image and save it.