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Biometrics

Report 1

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How to run

GitHub repository <https://github.com/AdPod/APBI> contains a set of separate tools to manipulate images. Those are python implementation of provided algorithms which run command line.

To run, type in console `$ python <filename> <image path>`

All programs depend on python packages, listed in file requirements.txt

Examples

Grayscale conversion:



Color inversion:



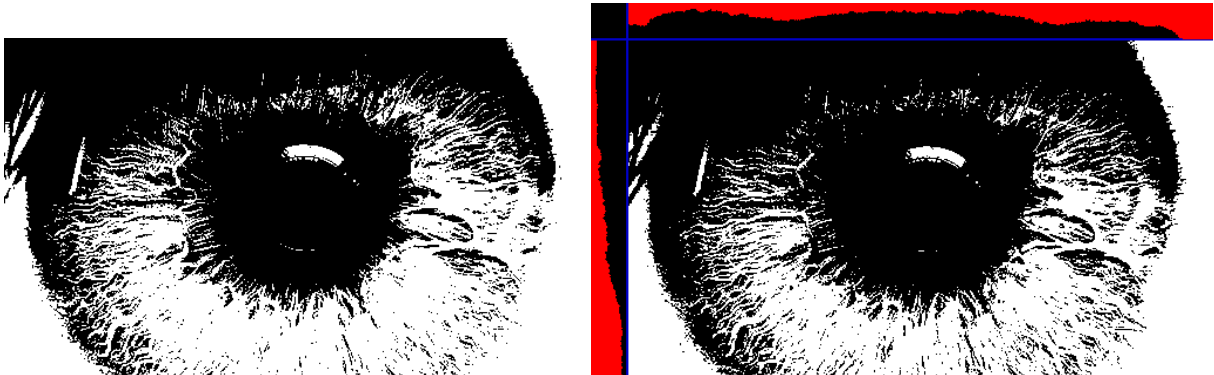
Brightness modification:



Threshold:

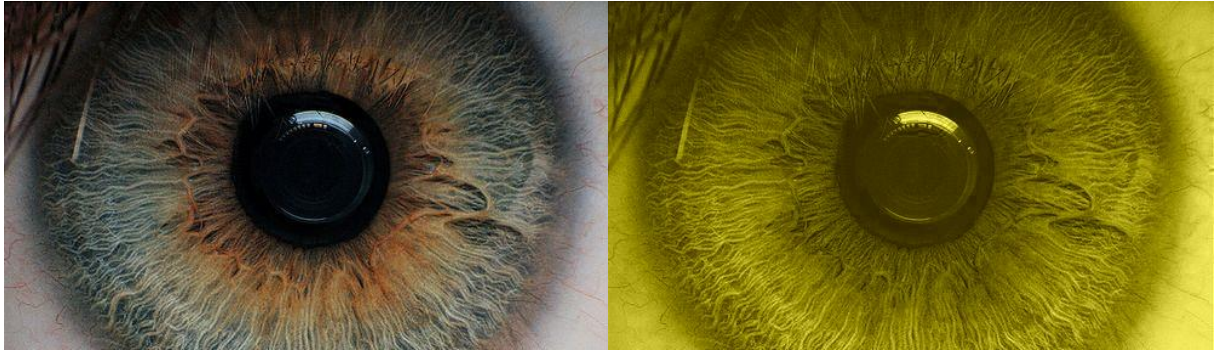


Horizontal + vertical projection:



Histogram manipulation:

A) Predefined manipulation ($R + 50$, $G + 40$, $B - 100$)



B) Histogram equalization



C) Histogram expansion



Filters:

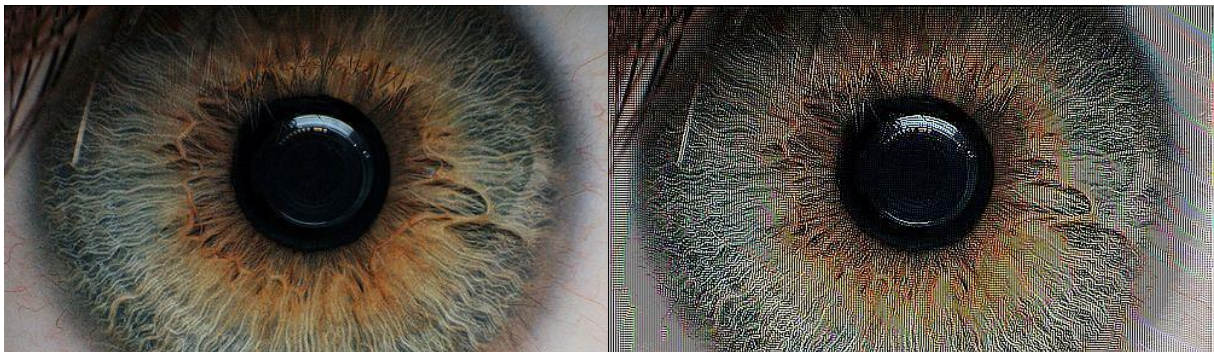
A) Averaging filter



B) Gauss filter



C) Sharpening filter



D) Roberts Cross



E) Sobel filter

