

Gaussian mixture model based segmentation GUI

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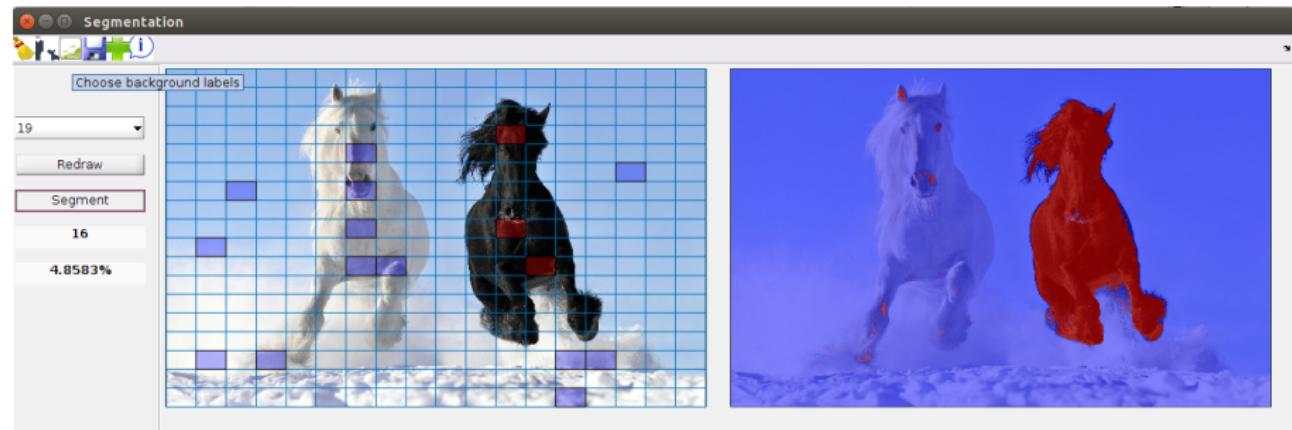
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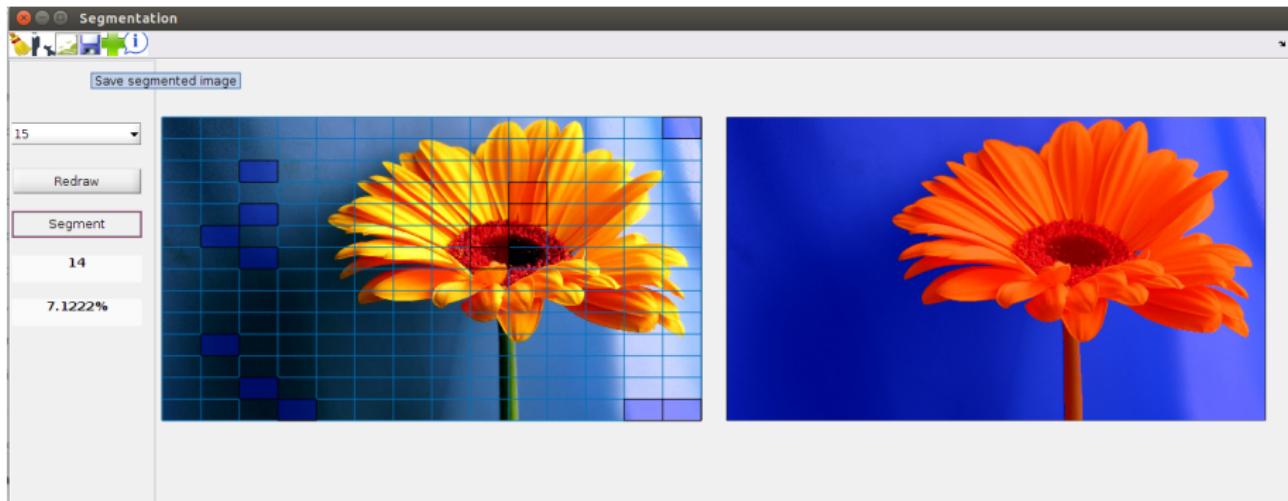
Example

This application provides Gaussian mixture model based segmentation.

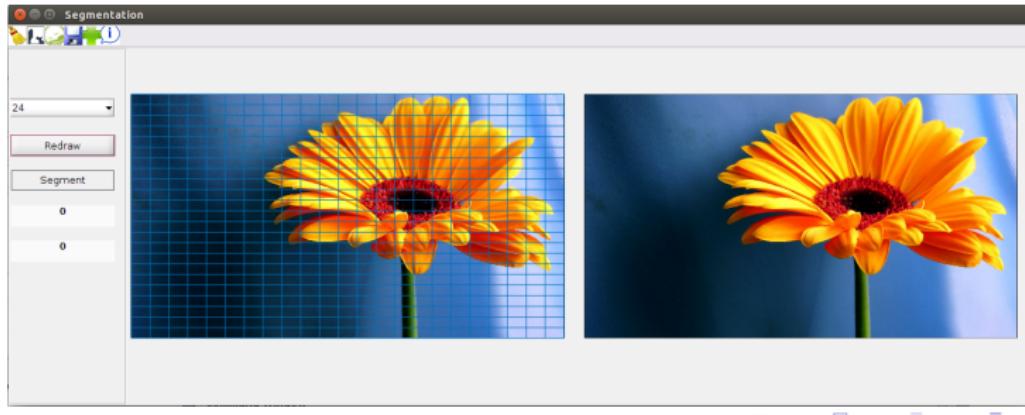
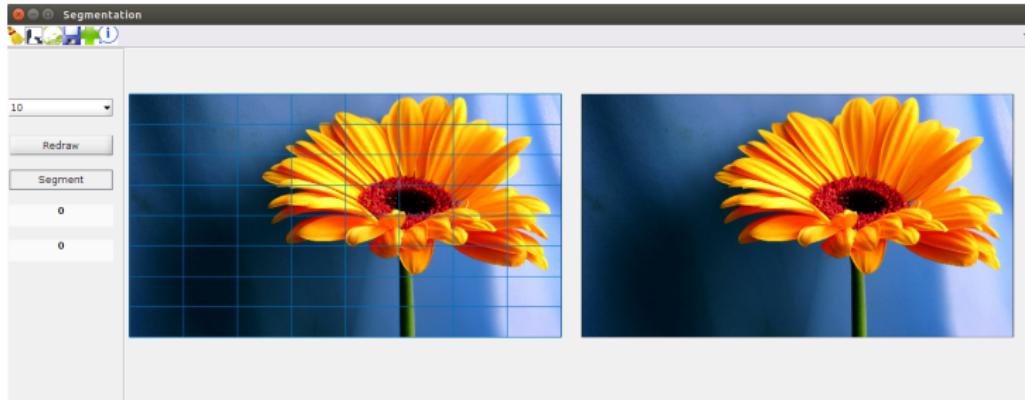
The user must select label foreground and background samples.



Example



Grid change



GMM segmentation

$$T_1 = \begin{matrix} \text{dark blue} & \text{light blue} & \text{dark blue} \end{matrix}$$

$$T_2 = \begin{matrix} \text{orange sunburst} & \text{red flower} \end{matrix}$$

The sample foreground pixels T_1 and the sample background pixels T_2 are used to determine foreground and background GMMs.

GMM segmentation

Following functions description was provided within the course
AE4M33DZO - Digital Image:

- segmentation_gmm.m
- gmm_estimation.m
- gmm_prob.m