

ECE 6310 Introduction to Computer Vision
Semester project – Segmenting foods

Rubberband model:

Initial vs Final Contour points

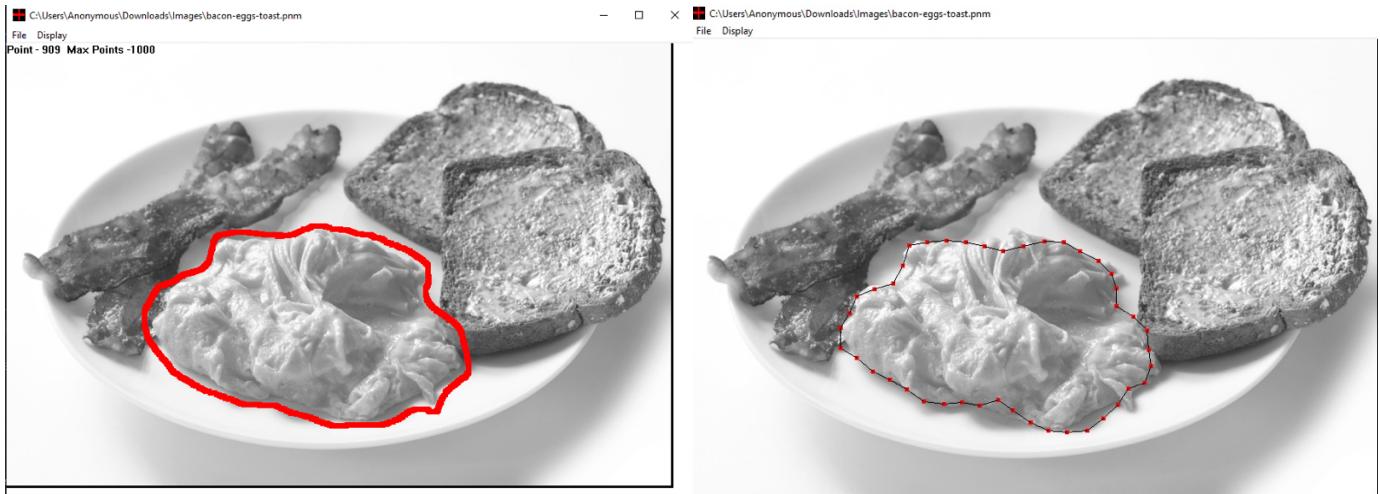


Image 1

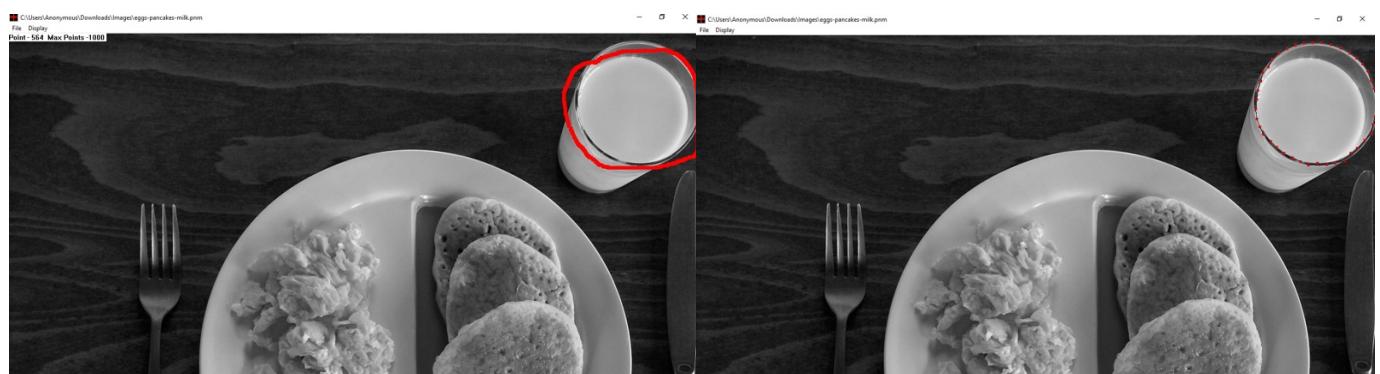


Image 2

C:\Users\Anonymous\Downloads\Images\fish-lemon-rice-greens.pnm
File Display
Point - 844 Max Points -1000



C:\Users\Anonymous\Downloads\Images\fish-lemon-rice-greens.pnm
File Display



Image 3

C:\Users\Anonymous\Downloads\Images\hushpupper-biscuits.pnm
File Display
Point - 1071 Max Points -1000



C:\Users\Anonymous\Downloads\Images\hushpupper-biscuits.pnm
File Display

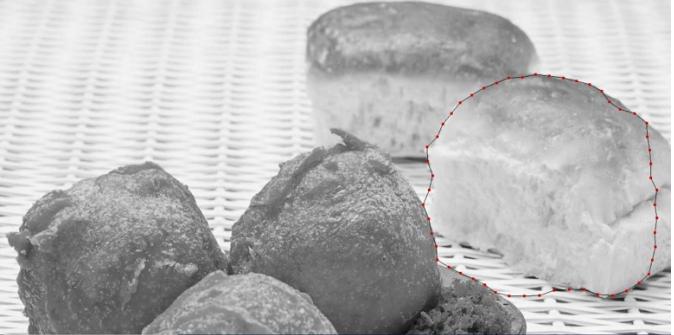


Image 4

C:\Users\Anonymous\Downloads\Images\macaroni-kale.pnm
File Display
Point - 363 Max Points -1000



C:\Users\Anonymous\Downloads\Images\macaroni-kale.pnm
File Display



Image 5

Balloon Model:



Image 6

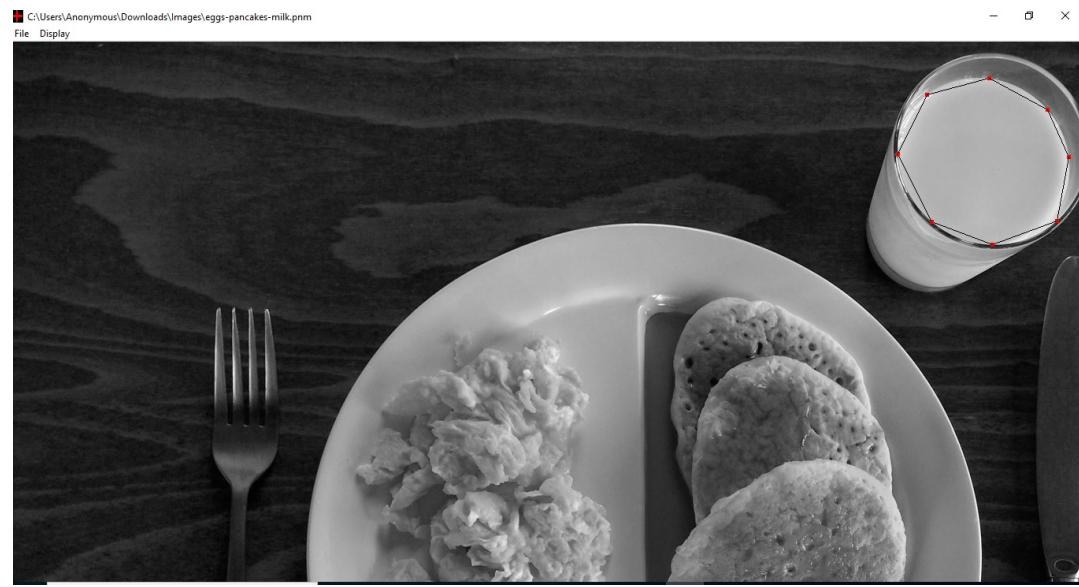


Image 7

C:\Users\Anonymous\Downloads\Images\fish-lemon-rice-greens.pnm
File Display



Image 8

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File Display



Image 9



Image 10

The above images are the results of the implementation of the active contour algorithm. The issue arises with the balloon model wherein the differentiation between internal and external energy terms couldn't be achieved successfully. The situation happened where there are ample terms present. A more efficient way for the algorithm to work is by using the proper weights for the internal and external energy terms.