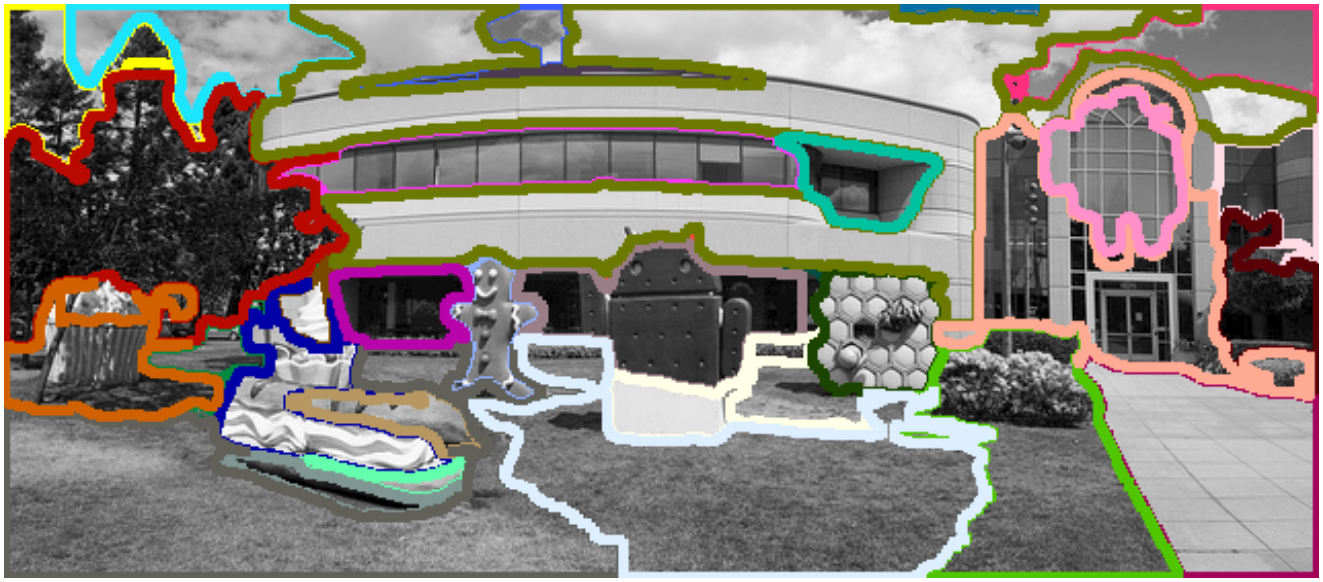
Quick, rough segmentation to create candidate curves, then MultiPartialShapeMatcher to match gingerbread man template.

S**egmentation** : formed using SLIC Super Pixels and images formed from polar angle theta between U and V in CIE LUV color space.
Contours: The contours of closed curves were extracted using a region fill algorithm and a Moore boundary tracing algorithm with Jacob's stopping criteria.

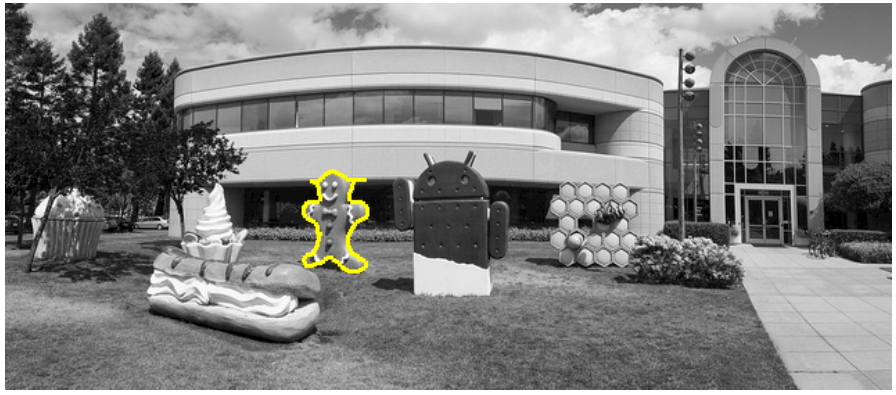
See MultiPartialShapeMatcherTest methods testAndroidStatues() and calcAndWriteCurvesToFile()

The MultiPartialShapeMatcher does well when the candidate contour does not contain a lot of adjacent merged material.
Because the MultiPartialShapeMatcher has to compromise to use a fixed number of points to remain fast, it does not handle the curves containing roughly the same amount or more of unmatchable points compared to matchable points.
For the later, one needs better curves from segmentation such as from the SAM2 segmentation models. Then the candidate curves such as the gingerbread and eclair are separated and MultiPartialShapeMatcher can find the correct candidate.

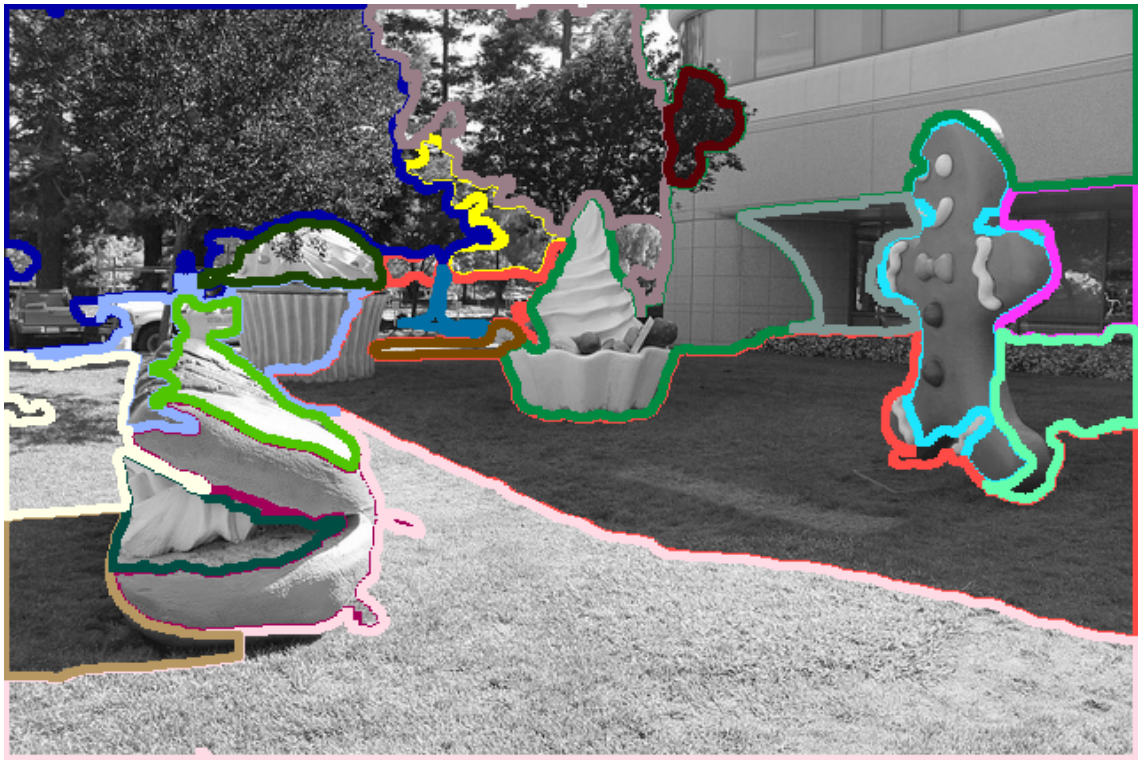
Quick, rough segmentation to create candidate curves



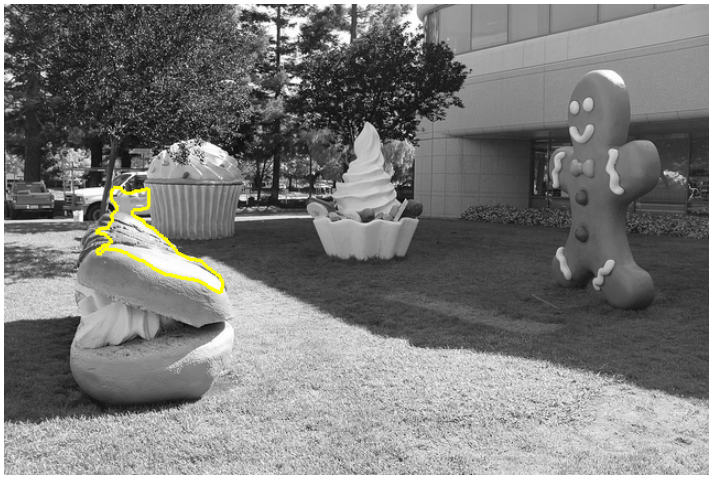
MultiPartialShapeMatcher to match gingerbread man among candidates finds:



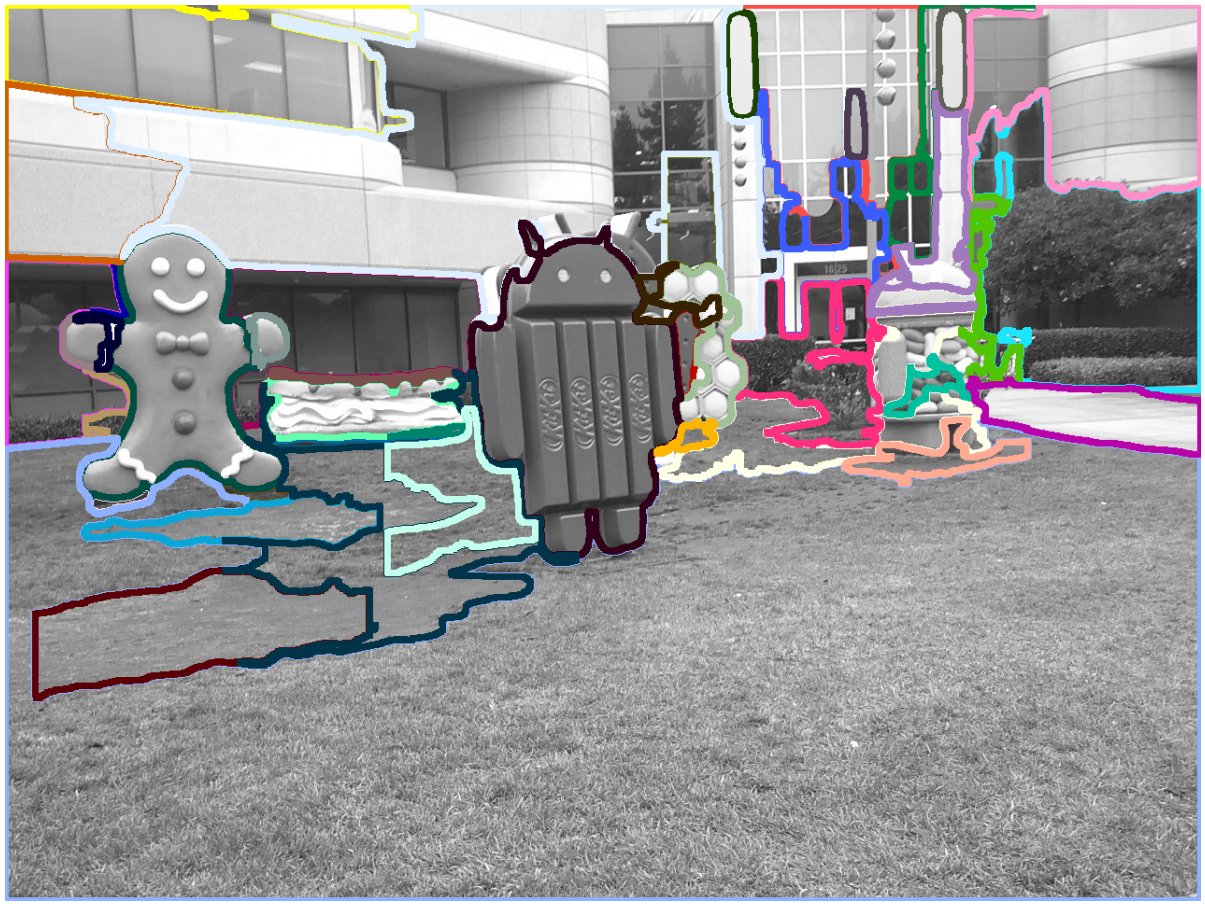
Quick, rough segmentation to create candidate curves



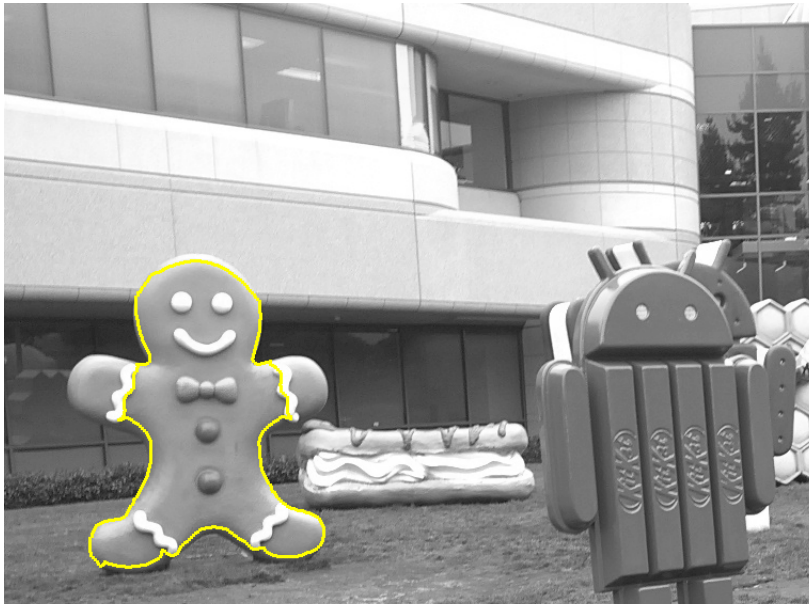
MultiPartialShapeMatcher to match gingerbread man among candidates finds:



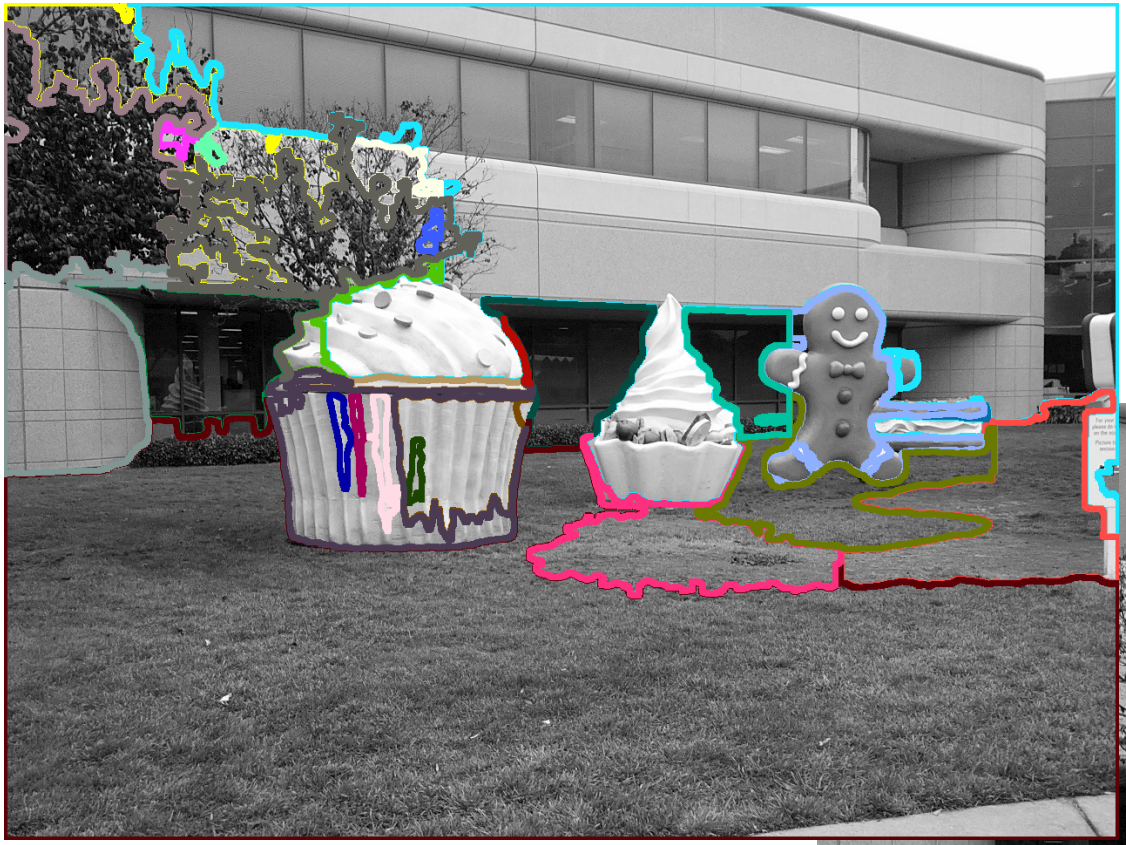
Quick, rough segmentation to create candidate curves



MultiPartialShapeMatcher to match gingerbread man among candidates finds:



Quick, rough segmentation to create candidate curves



MultiPartialShapeMatcher to match gingerbread man among candidates finds: