

# Abstract

We present a method that takes a raster image as input and produces a painting-like image composed of strokes rather than pixels. Our method works by first segmenting the image into features, finding the approximate medial axes of these features, and using the medial axes to guide brush stroke creation. System parameters may be interactively manipulated by a user to effect image segmentation, brush stroke characteristics, stroke size, and stroke frequency. This process creates images reminiscent of those contemporary representational painters whose work has an abstract or sketchy quality. Our software is available at <http://www.cs.utah.edu/npr/ArtisticVision>.

**CR Categories:** I.3.7 [Computing Methodologies ]: Computer Graphics—2D Graphics

**Keywords:** image moments, image processing, medial axis, non-photorealistic rendering, painting