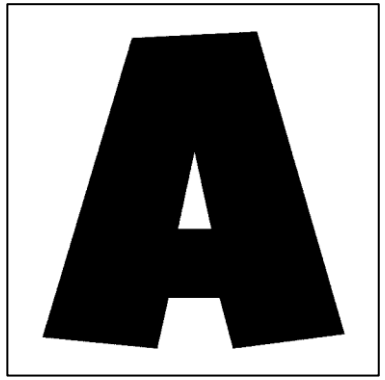
Vector Logo Image Synthesis Using Differentiable Renderer

shape image



text prompt

“Mt. Fuji”

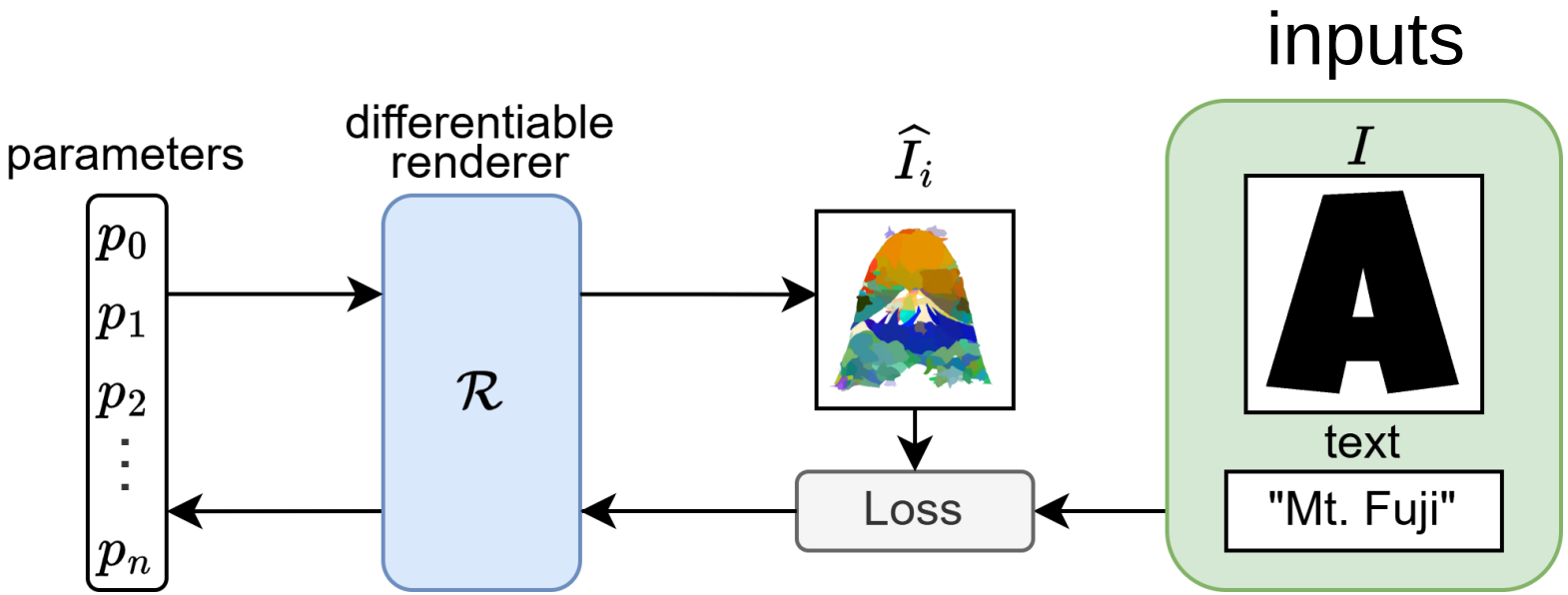
Generate

output

Stabilize the shape of vector paths

Abstract

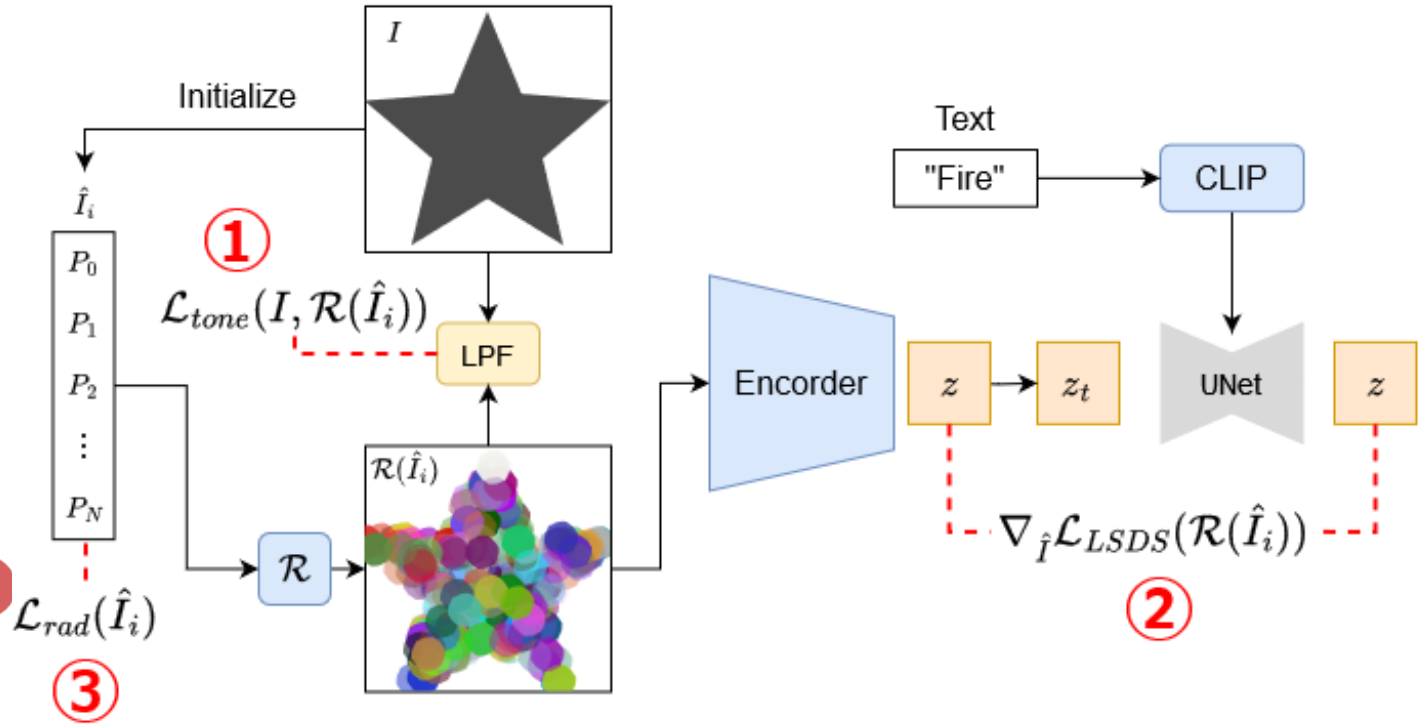
- Generate vector images from text and shape image inputs.
- Optimize vector parameters directory with differentiable render[1].



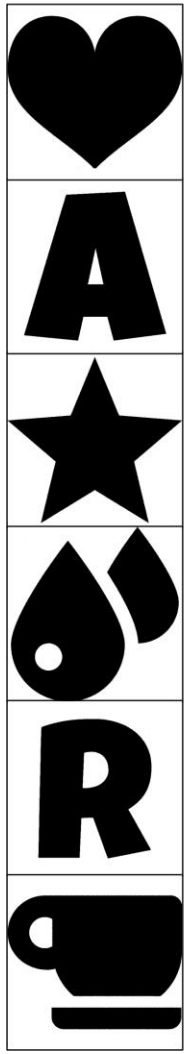
[1] Li, T., Luk´a˘c, M., M, G. and Ragan-Kelley, J.: Differentiable Vector Graphics Rasterization for Editing and Learning, SIGGRAPH, (2020).

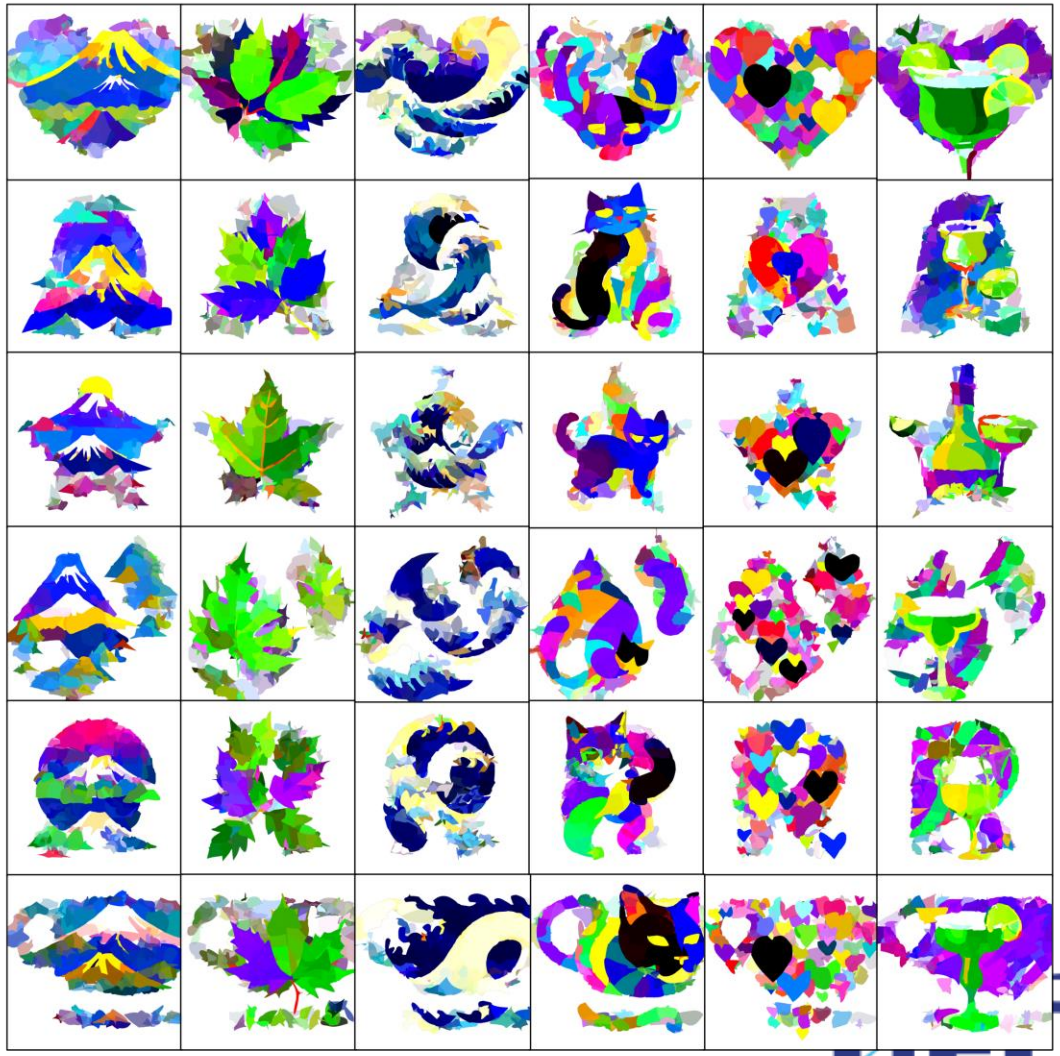
Abstract

- Loss Functions
  1. Tone Preserving Loss; reflect input image shape
  2. SDS Loss; reflect input text contents
  3. Radiation Loss; observe vector path parameters



Result


input
image


Mt.Fuji
a leaf
The great wave
off Kanagawa
a cat
heart
a margarita