

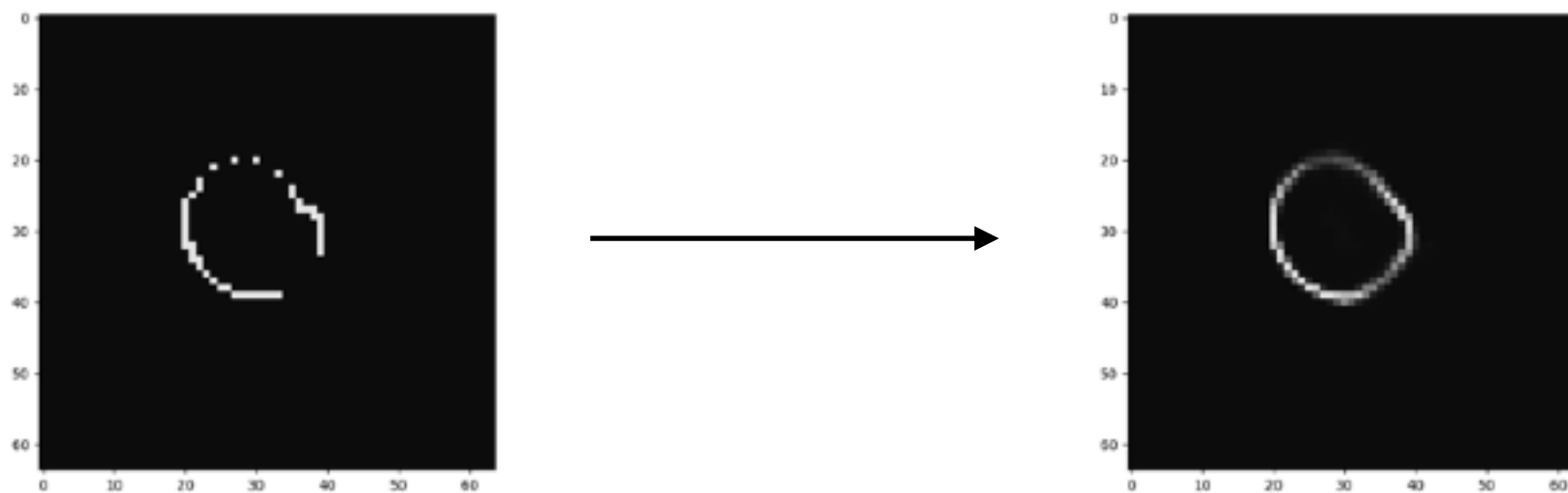
Generative Manipulation on the Mechanism Image Manifold

- Find Feature Vectors z , Based on User Input Recognition
- Additional constraints can be used for local search in z space with following objective :

$$z = \operatorname{argmin}_z (\underbrace{L(z_0, z)}_{\text{Distance from } z} + \underbrace{c(z)}_{\text{Pixelwise Constraint Loss}} + \underbrace{D(z)}_{\text{Discriminator Loss}})$$

Preliminary Results

Denoising + Inpainting



Latent Space Interpolation = Shape Transformation along the manifold

$$z_1 \quad \xrightarrow{\quad} \quad z = (t)z_1 + (1 - t)z_2 \quad \xrightarrow{\quad} \quad z_2$$

