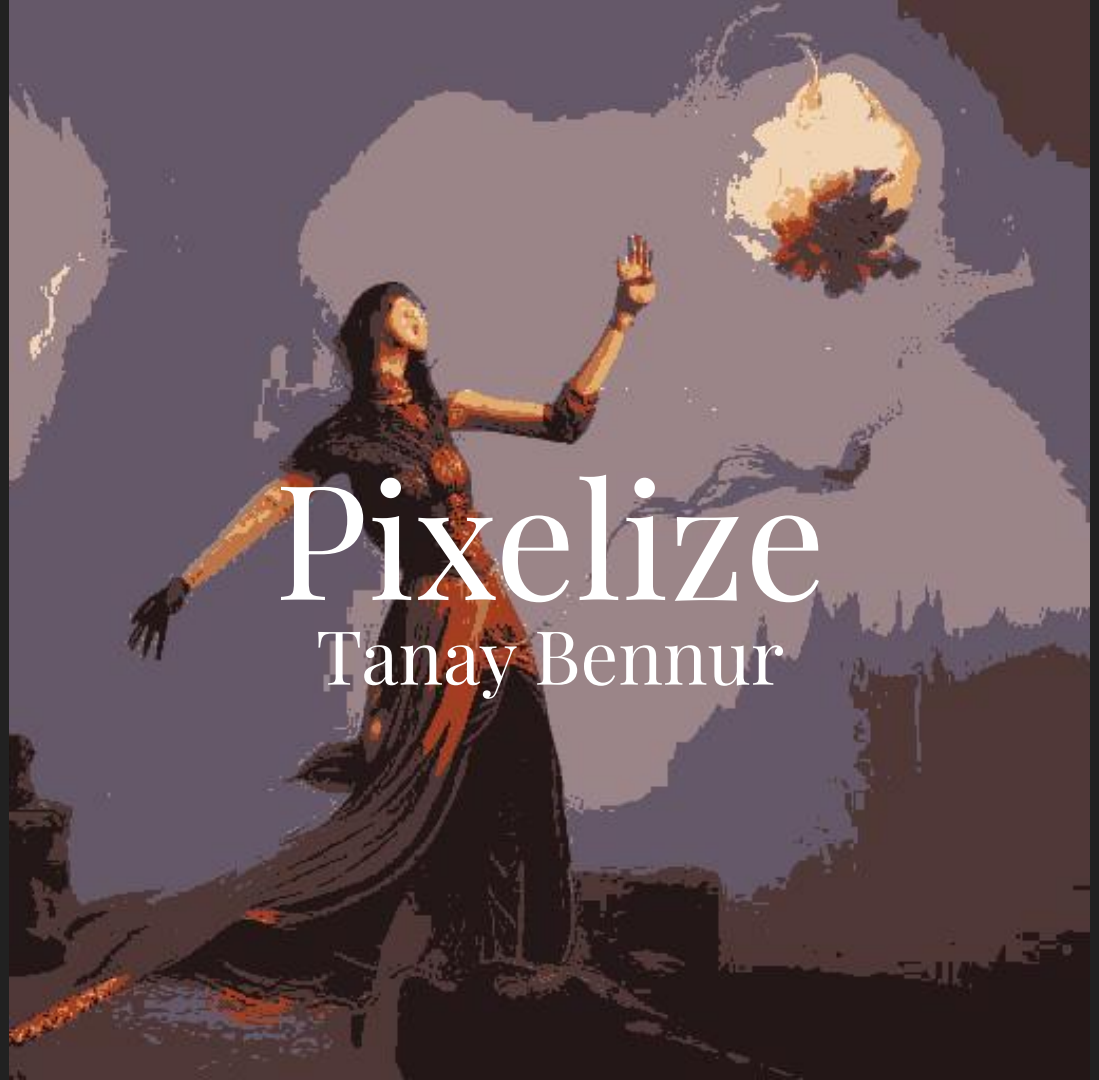
Pixelize
Tanay Bennur

Concept

- Current text-to-image models can’t create stylized pixel art
  - Models can generate generic pixel art, but not in a specific style
  - Models also can’t do this through neural methods like style transfer
- Generating stylized pixel art is useful for applications like indie video games
- This project addresses this gap by pairing a neural generative model with a non-neural restyling function

Image Generation

Images are generated via API calls to the Stable Diffusion model.

This image is “Woman Performing Sorcery”

Palette Generation

A web scraper searches for images in a given style. K-means clustering is used to generate a color palette.

This palette is “High Fantasy”

Restyling

The restylizer renders the generated image in the generated palette, yielding the stylized pixel art.

“Octopus Playing the Piano”

“Woman Performing Sorcery”

“Steampunk Cityscape”