Art & ML Project 4: Collaging Comics

Nellie Tonev

2nd-year undergraduate, Cognitive Science + HCI

Concept

- Generating a fantasy-genre comic book story and pages
 - Using both text- and image generation
- Inspiration: medium of comic art
 - The use of color schemes
 - The inclusion of meaningful artwork to supplement the story
 - Exploring how text and image interact
- Collaging:
 - Both for the text and final images, to create the look and feel of a comic or graphic novel

Techniques

Text Generation:

- Extracted a fantasy genre dataset from a Wikiplots corpus of plots from film and other media
- Fine-tuned GPT-2 to output fantasy plot summaries
- Chose a few sentences across several stories that flowed well together (for image generation)
- For narration in the final image, changed up the order of sentences and cut it so that it flowed better grammatically and had no contradictions.

Sample outputs from GPT-2:

This is a dark story that tells the tales of the creatures of the land, living in strange creatures' dreams.

The story begins as a family disappears after a nightmare.

When Nai discovers the ability, she is convinced that it is part of a powerful being who had possessed humans.

Shadow is an impure creature who has no body.

The Shadow's power can be harnessed by any creature.

There is something very powerful behind this power. It contains a great power called the magic of the moon. It is the power of a great race of living creatures that desce nded from the moon to form humans.

Techniques

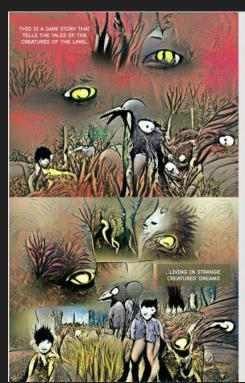
Image Generation:

- Inputted pieces of the story output from GPT-2 into VQGAN+CLIP Colab notebook
- Ran each prompt for about 400 iterations or until satisfied with result
 - Repeated a few prompts several times to determine best output
- Sometimes used just one line as a prompt; other times, used previous lines in addition in order to maintain context across different images



Prompt: Shadow is an impure creature who has no body. In comic style.

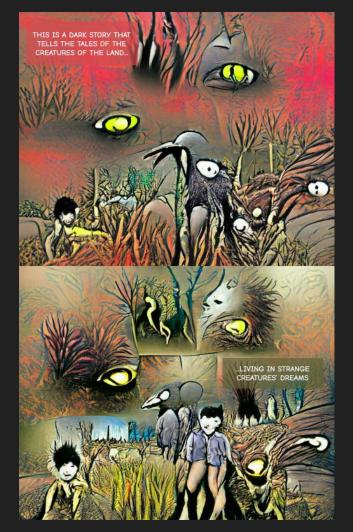
Results

















Reflections/Notes:

- Difficult for VQGAN to generate images of human characters in a comic style
 - However, had really interesting colors and shapes get created.
- I really liked the painted effect that the images had, and it was interesting to collage some of the later iterations with the prior iterations and explore different effects
 - I thought it went very well with the theme of shadowy figures and the supernatural elements within the story!

Thank you!