



MAISpeare

Generating poetry from images using ML



Dreams of cheese morsels run down
down to tummy with sabers we delight to eat the one
one of to the one and the one
who
is not and
that subsides...
and
yet

“A picture is worth a
thousand words...

but *which words are they?*

—

Introducing MAISpeare

upload an image, and AI will make you a poem

How it works

Our Flask web app:

- combines vanilla Javascript, HTML5, and CSS to create our frontend experience
- is powered by the Google Vision API to label the subjects of images, and a Long Short-Term Memory RNN using Tensorflow Keras in the backend



What it does

1. **Takes** user image input (.jpeg or .png)
2. **Leverages** Google Vision API to label all objects recognized from the image
3. **Passes** labeled objects to our Long Short-Term Memory neural network, trained on **over 20,000** lines of poetry from the Poems Dataset (NLP).
4. Using the poem prompt, our model then outputs a poem of **30** words, split into stanzas as *a unique free verse poem about the image*



What's next

- uploading saved images as input
- implementing a parser to better exploit information about sentence-internal structure
- counting syllables to fit into different meters of poetry
- incorporating rhyming and other poem structures
- training our model on datasets in different languages