Proposal outline

Introduction and motivation:

Context about pokemon, gaming and anime

Context about ML and generative models and their potential

Motivation for doing project: generating new pokemon, inspiration for new designs, my own personal excitement

What I want to do

What has been done:

Pokemon generation using gans.

Data:

My Plan:

Prompt engineering to see the limits of what I can do with the base model

Reproduce the work that has been done to fine tune stable diffusion with pokemon images

Gather data of different types (drawn imags, pixel sprites, pokemon cards, 3d models,…)

Sources: pokemondb.net, other websites, github data set, data sets from the different blogs, tweaking those datasets myself, and finally scraping data from the web.

Caption the data if necessary

Fine tune my own model using the data ive gathered and play around with it until I get good results (using two methods with images and text inversion

Prompt engineering again to generate the best possible images

Performance of the model will be measured by how close the newly generated pokemon are to the real pokemon in terms of shape, quality, clearness, distinct features, cohesiveness of look, etc. Will be compared to existing pokes and other generated pokemon

If there is time I will also try to fine tune the model to generate images of pokemon by type, or other attributes like height, weight, egg group, etc.