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Generate Faces

REVIEW

CODE REVIEW

HISTORY

Meets Specifications

Excellent work with the project! Yours is probably one of the best submissions I have come across till now.

Required Files and Tests

The project submission contains the project notebook, called "dlnd_face_generation.ipynb".

All the needed files are included.

All the unit tests in project have passed.

All tests passed!

Build the Neural Network

The function `model_inputs` is implemented correctly.

Good work. You correctly implemented the placeholders while ensuring the datatype was correct!

The function discriminator is implemented correctly.

Excellent work on implementing multiple conv layers and appropriately applying the necessary activation functions and using batch normalization.

A suggestion:

- Think about how filter size affects your model learning features for a CNN. As you increase the layers, your model learns more features, so does a larger filter size make sense or a smaller one to learn more features better?

The function generator is implemented correctly.

The function model_loss is implemented correctly.

Nicely done! Very impressive implementation.

The function model_opt is implemented correctly.

Neural Network Training

The function train is implemented correctly.

- It should build the model using `model_inputs`, `model_loss`, and `model_opt`.
- It should show output of the `generator` using the `show_generator_output` function

Very well done!

Do you think different learning rates for generator and discriminator optimizers here would help? Try it out :)

Here is a good resource on some tips and tricks on training GANs - <https://github.com/soumith/ganhacks> Do check it out!

The parameters are set reasonable numbers.

The project generates realistic faces. It should be obvious that images generated look like faces.

Nicely done!

You are getting some really good results when I run your model. Which is awesome. The suggestions I have provided can help even more to improve upon your model, but I recommend you try to run it your model now for more epochs and then on different datasets :)

As you might remember from P2, there's a lot to experiment when it comes to CNNs, so I encourage you to keep expanding on this model of yours :D

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