

# DTSA 5511 Introduction to Deep Learning - Mini Project 3


Tsai-Yun Li, 2023 Dec 4

## Output Results

**This file serves the purpose of making up for the Kaggle submission problem (reasons mentioned in section 6 of the jupyter notebook for this project).**


GitHub Repository Link: [https://github.com/TsaiYunLi/ML3\\_Miniporj3\\_TsaiYunLi](https://github.com/TsaiYunLi/ML3_Miniporj3_TsaiYunLi)

Here is the proof of my notebook running out of the 5-hour limit; however, having completed the task and got the output 'images.zip' file ready for submission:

 **Submit to Competition**

Notebook

File Upload



**I'm Something of a Painter Myself**  
You have 1 submissions remaining today. This resets in 12 hours.

SELECT NOTEBOOK

ML3\_Miniproj3\_d5

NOTEBOOK VERSION

version 3 (11/28, 10:59 AM)


OUTPUT FILE

images.zip

DESCRIPTION

Enter a description

0 / 500



**Cannot submit**  
Your Notebook's runtime of 514 minutes exceeds this competition's CPU max of 300 minutes.

Cancel

Submit

Here is a screenshot of this project's Kaggle notebook running log, also serving as a proof of completing the task:



# ML3\_Miniproj3\_d5

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## Logs

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Successfully ran in 30859.5s

Accelerator  
None

Environment  
[Latest Container Image](#)

Output  
551.37 MB

Time	#	Log Message
8.5s	1	Requirement already satisfied: tensorflow in /opt/conda/lib/python3.10/site-packages (2.13.0)
8.5s	2	Requirement already satisfied: absl-py>=1.0.0 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (1.4.0)
8.5s	3	Requirement already satisfied: astunparse>=1.6.0 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (1.6.3)
8.5s	4	Requirement already satisfied: flatbuffers>=23.1.21 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (23.5.26)
8.5s	5	Requirement already satisfied: gast<=0.4.0,>=0.2.1 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (0.4.0)
8.5s	6	Requirement already satisfied: google-pasta>=0.1.1 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (0.2.0)
8.5s	7	Requirement already satisfied: grpcio<2.0,>=1.24.3 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (1.57.0)
8.5s	8	Requirement already satisfied: h5py>=2.9.0 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (3.9.0)
8.5s	9	Requirement already satisfied: keras<2.14,>=2.13.1 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (2.13.1)
8.5s	10	Requirement already satisfied: libclang>=13.0.0 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (16.0.6)
8.5s	11	Requirement already satisfied: numpy<=1.24.3,>=1.22 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (1.24.3)
8.5s	12	Requirement already satisfied: opt-einsum>=2.3.2 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (3.3.0)
8.5s	13	Requirement already satisfied: packaging in /opt/conda/lib/python3.10/site-packages (from tensorflow) (21.3)
8.5s	14	Requirement already satisfied: protobuf!=4.21.0,!<4.21.1,!<4.21.2,!<4.21.3,!<4.21.4,!<4.21.5,<5.0.0dev,>=3.20.3 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (3.20.3)
8.5s	15	Requirement already satisfied: setuptools in /opt/conda/lib/python3.10/site-packages (from tensorflow) (68.1.2)
8.5s	16	Requirement already satisfied: six>=1.12.0 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (1.16.0)
8.5s	17	Requirement already satisfied: tensorboard<2.14,>=2.13 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (2.13.0)
8.5s	18	Requirement already satisfied: tensorflow-estimator<2.14,>=2.13.0 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (2.13.0)
8.5s	19	Requirement already satisfied: termcolor>=1.1.0 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (2.3.0)
8.5s	20	Requirement already satisfied: typing-extensions<4.6.0,>=3.6.6 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (4.5.0)
8.5s	21	Requirement already satisfied: wrapt>=1.11.0 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (1.15.0)
8.6s	22	Requirement already satisfied: tensorflow-io-gcs-filesystem>=0.23.1 in /opt/conda/lib/python3.10/site-packages (from tensorflow) (0.34.0)
8.6s	23	Requirement already satisfied: wheel<1.0,>=0.23.0 in /opt/conda/lib/python3.10/site-packages (from astunparse>=1.6.0->tensorflow) (0.41.2)
8.6s	24	Requirement already satisfied: google-auth<3,>=1.6.3 in /opt/conda/lib/python3.10/site-packages (from tensorboard<2.14,>=2.13->tensorflow) (2.22.0)
8.6s	25	Requirement already satisfied: google-auth-oauthlib<1.1,>=0.5 in /opt/conda/lib/python3.10/site-packages (from tensorboard<2.14,>=2.13->tensorflow) (1.0.0)
8.6s	26	Requirement already satisfied: markdown>=2.6.8 in /opt/conda/lib/python3.10/site-packages (from tensorboard<2.14,>=2.13->tensorflow) (3.4.4)
8.6s	27	Requirement already satisfied: requests<3,>=2.21.0 in /opt/conda/lib/python3.10/site-packages (from tensorboard<2.14,>=2.13->tensorflow) (2.31.0)
8.6s	28	Requirement already satisfied: tensorboard-data-server<0.8.0,>=0.7.0 in /opt/conda/lib/python3.10/site-packages (from tensorboard<2.14,>=2.13->tensorflow) (0.7.1)
8.6s	29	Requirement already satisfied: werkzeug>=1.0.1 in /opt/conda/lib/python3.10/site-packages (from tensorboard<2.14,>=2.13->tensorflow) (3.0.1)
8.7s	30	Requirement already satisfied: pyparsing!=3.0.5,>=2.0.2 in /opt/conda/lib/python3.10/site-packages (from packaging->tensorflow) (3.0.9)

```
8.7s 31 Requirement already satisfied: cachetools<6.0,>=2.0.0 in /opt/conda/lib/python3.10/site-packages (from google-  
auth<3,>=1.6.3->tensorboard<2.14,>=2.13->tensorflow) (4.2.4)  
8.7s 32 Requirement already satisfied: pyasn1-modules>=0.2.1 in /opt/conda/lib/python3.10/site-packages (from google-  
auth<3,>=1.6.3->tensorboard<2.14,>=2.13->tensorflow) (0.2.7)  
8.7s 33 Requirement already satisfied: rsa<5,>=3.1.4 in /opt/conda/lib/python3.10/site-packages (from google-auth<3,>=1.6.3-  
>tensorboard<2.14,>=2.13->tensorflow) (4.9)  
8.7s 34 Requirement already satisfied: urllib3<2.0 in /opt/conda/lib/python3.10/site-packages (from google-auth<3,>=1.6.3-  
>tensorboard<2.14,>=2.13->tensorflow) (1.26.15)  
8.8s 35 Requirement already satisfied: requests-oauthlib>=0.7.0 in /opt/conda/lib/python3.10/site-packages (from google-auth-  
oauthlib<1.1,>=0.5->tensorboard<2.14,>=2.13->tensorflow) (1.3.1)  
8.8s 36 Requirement already satisfied: charset-normalizer<4,>=2 in /opt/conda/lib/python3.10/site-packages (from  
requests<3,>=2.21.0->tensorboard<2.14,>=2.13->tensorflow) (3.2.0)  
8.8s 37 Requirement already satisfied: idna<4,>=2.5 in /opt/conda/lib/python3.10/site-packages (from requests<3,>=2.21.0-  
>tensorboard<2.14,>=2.13->tensorflow) (3.4)  
8.8s 38 Requirement already satisfied: certifi>=2017.4.17 in /opt/conda/lib/python3.10/site-packages (from  
requests<3,>=2.21.0->tensorboard<2.14,>=2.13->tensorflow) (2023.7.22)  
8.8s 39 Requirement already satisfied: MarkupSafe>=2.1.1 in /opt/conda/lib/python3.10/site-packages (from werkzeug>=1.0.1-  
>tensorboard<2.14,>=2.13->tensorflow) (2.1.3)  
8.9s 40 Requirement already satisfied: pyasn1<0.5.0,>=0.4.6 in /opt/conda/lib/python3.10/site-packages (from pyasn1-  
modules>=0.2.1->google-auth<3,>=1.6.3->tensorboard<2.14,>=2.13->tensorflow) (0.4.8)  
8.9s 41 Requirement already satisfied: oauthlib>=3.0.0 in /opt/conda/lib/python3.10/site-packages (from requests-  
oauthlib>=0.7.0->google-auth-oauthlib<1.1,>=0.5->tensorboard<2.14,>=2.13->tensorflow) (3.2.2)  
42.2s 42 The monet_dataset contains 300 paintings in jpg format.  
42.2s 43 The photo_dataset contains 7038 photos in jpg format.  
  
42.4s 44 6 random Monet paintings from the monet_dataset:  
43.2s 45 6 random photos from the photo_dataset:  
64.9s 46 monet_dataset shape analysis:  
64.9s 47 all images have the same shape: (256, 256, 3)  
64.9s 48 photo_dataset shape analysis:  
64.9s 49 all images have the same shape: (256, 256, 3)  
111.9s 50  
113.6s 51 num_batches_x = 10  
113.6s 52 num_batches_y = 220  
115.9s 53 Requirement already satisfied: tensorflow-addons in /opt/conda/lib/python3.10/site-packages (0.22.0)  
115.9s 54 Requirement already satisfied: packaging in /opt/conda/lib/python3.10/site-packages (from tensorflow-addons) (21.3)  
115.9s 55 Requirement already satisfied: typeguard<3.0.0,>=2.7 in /opt/conda/lib/python3.10/site-packages (from tensorflow-  
addons) (2.13.3)  
115.9s 56 Requirement already satisfied: pyparsing!=3.0.5,>=2.0.2 in /opt/conda/lib/python3.10/site-packages (from packaging-  
>tensorflow-addons) (3.0.9)  
129.0s 57 /opt/conda/lib/python3.10/site-packages/tensorflow_addons/utils/tfa_eol_msg.py:23: UserWarning:  
129.0s 58  
129.0s 59 TensorFlow Addons (TFA) has ended development and introduction of new features.  
129.0s 60 TFA has entered a minimal maintenance and release mode until a planned end of life in May 2024.  
129.0s 61 Please modify downstream libraries to take dependencies from other repositories in our TensorFlow community (e.g.  
Keras, Keras-CV, and Keras-NLP).  
129.0s 62  
  
129.0s 63 For more information see: https://github.com/tensorflow/addons/issues/2807  
129.0s 64  
129.0s 65 warnings.warn(  
136.3s 66 Requirement already satisfied: tqdm in /opt/conda/lib/python3.10/site-packages (4.66.1)  
Epoch 1/1: 0%|          | 0/220 [00:00<?, ?batch/s]Epoch 1/1: 0%|          | 1/220 [03:12<11:41:44,  
192.26s/batch]Epoch 1/1: 1%|          | 2/220 [05:21<9:23:33, 155.11s/batch]Epoch 1/1: 1%|          | 3/220  
[07:31<8:39:47, 143.72s/batch]Epoch 1/1: 2%|          | 4/220 [09:40<8:16:12, 137.84s/batch]Epoch 1/1: 2%|          |  
5/220 [11:48<8:01:27, 134.36s/batch]Epoch 1/1: 3%|          | 6/220 [13:59<7:54:50, 133.13s/batch]Epoch  
1/1: 3%|          | 7/220 [16:09<7:49:19, 132.21s/batch]Epoch 1/1: 4%|          | 8/220 [18:18<7:43:29,  
131.18s/batch]Epoch 1/1: 4%|          | 9/220 [20:28<7:40:27, 130.93s/batch]Epoch 1/1: 5%|          | 10/220  
[22:23<7:20:55, 125.98s/batch]Epoch 1/1: 5%|          | 11/220 [24:34<7:24:01, 127.47s/batch]Epoch 1/1: 5%|          |  
12/220 [26:46<7:25:56, 128.64s/batch]Epoch 1/1: 6%|          | 13/220 [28:54<7:24:04, 128.72s/batch]Epoch  
1/1: 6%|          | 14/220 [31:04<7:22:30, 128.89s/batch]Epoch 1/1: 7%|          | 15/220 [33:13<7:20:30,  
128.93s/batch]Epoch 1/1: 7%|          | 16/220 [35:22<7:18:50, 129.07s/batch]Epoch 1/1: 8%|          | 17/220  
[37:32<7:17:51, 129.42s/batch]Epoch 1/1: 8%|          | 18/220 [39:41<7:14:58, 129.20s/batch]Epoch 1/1: 9%|          |  
19/220 [41:50<7:12:22, 129.07s/batch]Epoch 1/1: 9%|          | 20/220 [43:18<6:28:57, 116.69s/batch]Epoch  
1/1: 10%|          | 21/220 [45:27<6:39:13, 120.37s/batch]Epoch 1/1: 10%|          | 22/220 [47:37<6:46:56,  
123.32s/batch]Epoch 1/1: 10%|          | 23/220 [49:46<6:50:29, 125.03s/batch]Epoch 1/1: 11%|          | 24/220  
[51:55<6:52:43, 126.34s/batch]Epoch 1/1: 11%|          | 25/220 [54:04<6:53:18, 127.17s/batch]Epoch 1/1: 12%|          |  
26/220 [56:14<6:53:13, 127.80s/batch]Epoch 1/1: 12%|          | 27/220 [58:23<6:52:16, 128.17s/batch]Epoch  
1/1: 13%|          | 28/220 [1:00:32<6:50:59, 128.43s/batch]Epoch 1/1: 13%|          | 29/220 [1:02:41<6:49:30,  
128.64s/batch]Epoch 1/1: 14%|          | 30/220 [1:04:09<6:08:42, 116.44s/batch]Epoch 1/1: 14%|          | 31/220  
[1:06:18<6:18:44, 120.23s/batch]Epoch 1/1: 15%|          | 32/220 [1:08:27<6:25:15, 122.96s/batch]Epoch 1/1: 15%|  
          | 33/220 [1:10:36<6:29:09, 124.86s/batch]Epoch 1/1: 15%|          | 34/220 [1:12:46<6:31:26,  
126.27s/batch]Epoch 1/1: 16%|          | 35/220 [1:14:57<6:33:14, 127.54s/batch]Epoch 1/1: 16%|          | 36/220  
[1:17:06<6:33:13, 128.23s/batch]Epoch 1/1: 17%|          | 37/220 [1:19:17<6:33:07, 128.89s/batch]Epoch 1/1: 17%|  
          | 38/220 [1:21:26<6:31:20, 129.01s/batch]Epoch 1/1: 18%|          | 39/220 [1:23:35<6:29:32,  
129.13s/batch]Epoch 1/1: 18%|          | 40/220 [1:25:04<5:51:12, 117.07s/batch]Epoch 1/1: 19%|          | 41/220  
[1:27:14<6:00:15, 120.76s/batch]Epoch 1/1: 19%|          | 42/220 [1:29:23<6:05:50, 123.32s/batch]Epoch 1/1: 20%|  
          | 43/220 [1:31:32<6:08:23, 124.88s/batch]Epoch 1/1: 20%|          | 44/220 [1:33:41<6:10:25,
```

126.28s/batch]Epoch 1/1: 20%|██████████| 45/220 [1:35:50<6:10:17, 126.96s/batch]Epoch 1/1: 21%|██████████| 46/220 [1:38:13<6:22:35, 131.93s/batch]Epoch 1/1: 21%|██████████| 47/220 [1:40:25<6:20:06, 131.83s/batch]Epoch 1/1: 22%|██████████| 48/220 [1:42:35<6:16:40, 131.40s/batch]Epoch 1/1: 22%|██████████| 49/220 [1:44:50<6:17:23, 132.42s/batch]Epoch 1/1: 23%|██████████| 50/220 [1:46:19<6:53:00, 119.30s/batch]Epoch 1/1: 23%|██████████| 51/220 [1:48:58<6:09:41, 131.25s/batch]Epoch 1/1: 24%|██████████| 52/220 [1:51:09<6:07:25, 131.22s/batch]Epoch 1/1: 24%|██████████| 53/220 [1:53:19<6:03:58, 130.77s/batch]Epoch 1/1: 25%|██████████| 54/220 [1:55:38<6:08:44, 133.28s/batch]Epoch 1/1: 25%|██████████| 55/220 [1:58:16<6:27:12, 140.80s/batch]Epoch 1/1: 25%|██████████| 56/220 [2:00:35<6:23:09, 140.18s/batch]Epoch 1/1: 26%|██████████| 57/220 [2:02:51<6:17:31, 138.96s/batch]Epoch 1/1: 26%|██████████| 58/220 [2:05:05<6:11:18, 137.52s/batch]Epoch 1/1: 27%|██████████| 59/220 [2:07:19<6:06:15, 136.49s/batch]Epoch 1/1: 27%|██████████| 60/220 [2:09:13<5:45:55, 129.72s/batch]Epoch 1/1: 28%|██████████| 61/220 [2:11:25<5:45:33, 130.40s/batch]Epoch 1/1: 28%|██████████| 62/220 [2:13:35<5:42:43, 130.15s/batch]Epoch 1/1: 29%|██████████| 63/220 [2:15:50<5:44:42, 131.73s/batch]Epoch 1/1: 29%|██████████| 64/220 [2:17:59<5:40:34, 130.99s/batch]Epoch 1/1: 30%|██████████| 65/220 [2:20:30<5:53:21, 136.79s/batch]Epoch 1/1: 30%|██████████| 66/220 [2:22:40<5:46:22, 134.95s/batch]Epoch 1/1: 30%|██████████| 67/220 [2:24:50<5:40:15, 133.43s/batch]Epoch 1/1: 31%|██████████| 68/220 [2:27:00<5:35:21, 132.38s/batch]Epoch 1/1: 31%|██████████| 69/220 [2:29:42<5:55:09, 141.12s/batch]Epoch 1/1: 32%|██████████| 70/220 [2:31:15<5:17:02, 126.82s/batch]Epoch 1/1: 32%|██████████| 71/220 [2:33:26<5:17:58, 128.05s/batch]Epoch 1/1: 33%|██████████| 72/220 [2:35:37<5:18:00, 128.92s/batch]Epoch 1/1: 33%|██████████| 73/220 [2:37:46<5:15:53, 128.93s/batch]Epoch 1/1: 34%|██████████| 74/220 [2:40:10<5:24:29, 133.35s/batch]Epoch 1/1: 34%|██████████| 75/220 [2:42:35<5:30:45, 136.86s/batch]Epoch 1/1: 35%|██████████| 76/220 [2:44:45<5:23:23, 134.75s/batch]Epoch 1/1: 35%|██████████| 77/220 [2:46:54<5:17:30, 133.22s/batch]Epoch 1/1: 35%|██████████| 78/220 [2:49:04<5:12:30, 132.05s/batch]Epoch 1/1: 36%|██████████| 79/220 [2:51:37<5:25:10, 138.37s/batch]Epoch 1/1: 36%|██████████| 80/220 [2:53:09<4:50:30, 124.50s/batch]Epoch 1/1: 37%|██████████| 81/220 [2:55:20<4:53:04, 126.51s/batch]Epoch 1/1: 37%|██████████| 82/220 [2:57:37<4:58:10, 129.64s/batch]Epoch 1/1: 38%|██████████| 83/220 [2:59:46<4:55:45, 129.53s/batch]Epoch 1/1: 38%|██████████| 84/220 [3:02:12<5:04:35, 134.38s/batch]Epoch 1/1: 39%|██████████| 85/220 [3:04:21<4:58:59, 132.89s/batch]Epoch 1/1: 39%|██████████| 86/220 [3:06:30<4:54:12, 131.73s/batch]Epoch 1/1: 40%|██████████| 87/220 [3:08:39<4:49:59, 130.82s/batch]Epoch 1/1: 40%|██████████| 88/220 [3:10:48<4:46:22, 130.17s/batch]Epoch 1/1: 40%|██████████| 89/220 [3:13:11<4:52:29, 133.96s/batch]Epoch 1/1: 41%|██████████| 90/220 [3:14:39<4:20:24, 120.18s/batch]Epoch 1/1: 41%|██████████| 91/220 [3:16:48<4:24:11, 122.88s/batch]Epoch 1/1: 42%|██████████| 92/220 [3:18:57<4:26:24, 124.88s/batch]Epoch 1/1: 42%|██████████| 93/220 [3:21:09<4:28:43, 126.96s/batch]Epoch 1/1: 43%|██████████| 94/220 [3:23:18<4:27:33, 127.41s/batch]Epoch 1/1: 43%|██████████| 95/220 [3:25:29<4:28:07, 128.70s/batch]Epoch 1/1: 44%|██████████| 96/220 [3:27:38<4:26:06, 128.76s/batch]Epoch 1/1: 44%|██████████| 97/220 [3:29:47<4:23:43, 128.65s/batch]Epoch 1/1: 45%|██████████| 103/220 [3:42:01<4:03:07, 124.68s/batch]Epoch 1/1: 47%|██████████| 104/220 [3:44:09<4:03:08, 125.76s/batch]Epoch 1/1: 48%|██████████| 105/220 [3:46:18<4:02:34, 126.56s/batch]Epoch 1/1: 48%|██████████| 106/220 [3:48:25<4:01:12, 126.95s/batch]Epoch 1/1: 49%|██████████| 107/220 [3:51:00<4:14:32, 135.16s/batch]Epoch 1/1: 49%|██████████| 108/220 [3:53:08<4:08:40, 133.22s/batch]Epoch 1/1: 50%|██████████| 109/220 [3:55:22<4:06:53, 133.45s/batch]Epoch 1/1: 50%|██████████| 110/220 [3:56:50<3:39:17, 119.62s/batch]Epoch 1/1: 50%|██████████| 111/220 [3:59:04<3:45:14, 123.99s/batch]Epoch 1/1: 51%|██████████| 112/220 [4:01:43<4:02:17, 134.61s/batch]Epoch 1/1: 51%|██████████| 113/220 [4:03:56<3:59:05, 134.07s/batch]Epoch 1/1: 52%|██████████| 114/220 [4:06:09<3:56:04, 133.63s/batch]Epoch 1/1: 52%|██████████| 115/220 [4:08:21<3:53:09, 133.23s/batch]Epoch 1/1: 53%|██████████| 116/220 [4:10:58<4:03:25, 140.43s/batch]Epoch 1/1: 53%|██████████| 117/220 [4:13:12<3:57:41, 138.46s/batch]Epoch 1/1: 54%|██████████| 118/220 [4:15:26<3:53:02, 137.08s/batch]Epoch 1/1: 54%|██████████| 119/220 [4:17:38<3:48:09, 135.54s/batch]Epoch 1/1: 55%|██████████| 120/220 [4:19:13<3:25:29, 123.30s/batch]Epoch 1/1: 55%|██████████| 121/220 [4:21:26<3:28:16, 126.23s/batch]Epoch 1/1: 55%|██████████| 122/220 [4:23:39<3:29:23, 128.20s/batch]Epoch 1/1: 56%|██████████| 123/220 [4:25:51<3:29:24, 129.53s/batch]Epoch 1/1: 56%|██████████| 124/220 [4:28:04<3:28:53, 130.56s/batch]Epoch 1/1: 57%|██████████| 125/220 [4:30:17<3:27:39, 131.16s/batch]Epoch 1/1: 57%|██████████| 126/220 [4:32:29<3:26:08, 131.58s/batch]Epoch 1/1: 58%|██████████| 127/220 [4:34:42<3:24:36, 132.00s/batch]Epoch 1/1: 58%|██████████| 128/220 [4:36:55<3:22:40, 132.17s/batch]Epoch 1/1: 59%|██████████| 129/220 [4:39:06<3:20:12, 132.00s/batch]Epoch 1/1: 59%|██████████| 130/220 [4:40:36<2:58:48, 119.21s/batch]Epoch 1/1: 60%|██████████| 131/220 [4:42:48<3:02:32, 123.06s/batch]Epoch 1/1: 60%|██████████| 132/220 [4:45:00<3:04:39, 125.91s/batch]Epoch 1/1: 60%|██████████| 133/220 [4:47:11<3:04:40, 127.36s/batch]Epoch 1/1: 61%|██████████| 134/220 [4:49:22<3:04:03, 128.41s/batch]Epoch 1/1: 61%|██████████| 135/220 [4:51:36<3:04:27, 130.21s/batch]Epoch 1/1: 62%|██████████| 136/220 [4:53:48<3:02:57, 130.69s/batch]Epoch 1/1: 62%|██████████| 137/220 [4:56:00<3:01:02, 130.87s/batch]Epoch 1/1: 63%|██████████| 138/220 [4:58:11<2:59:14, 131.15s/batch]Epoch 1/1: 63%|██████████| 139/220 [5:00:22<2:57:03, 131.16s/batch]Epoch 1/1: 64%|██████████| 140/220 [5:01:52<2:38:14, 118.68s/batch]Epoch 1/1: 64%|██████████| 141/220 [5:04:23<2:49:08, 128.46s/batch]Epoch 1/1: 65%|██████████| 142/220 [5:06:35<2:48:26, 129.57s/batch]Epoch 1/1: 65%|██████████| 143/220 [5:08:48<2:47:16, 130.34s/batch]Epoch 1/1: 65%|██████████| 144/220 [5:10:59<2:45:23, 130.58s/batch]Epoch 1/1: 66%|██████████| 145/220 [5:13:22<2:48:02, 134.43s/batch]Epoch 1/1: 66%|██████████| 146/220 [5:15:48<2:49:56, 137.79s/batch]Epoch 1/1: 67%|██████████| 147/220 [5:17:59<2:45:05, 135.69s/batch]Epoch 1/1: 67%|██████████| 148/220 [5:20:16<2:43:21, 136.14s/batch]Epoch 1/1: 68%|██████████| 149/220 [5:22:26<2:38:58, 134.35s/batch]Epoch 1/1: 68%|██████████| 150/220 [5:23:54<2:20:39, 120.56s/batch]Epoch 1/1: 69%|██████████| 151/220 [5:26:04<2:21:52, 123.38s/batch]Epoch 1/1: 69%|██████████| 152/220 [5:28:17<2:22:50, 126.03s/batch]Epoch 1/1: 70%|██████████| 153/220 [5:30:45<2:28:17, 132.80s/batch]Epoch 1/1: 70%|██████████| 154/220 [5:32:57<2:25:46, 132.53s/batch]Epoch 1/1: 70%|██████████| 155/220 [5:35:07<2:22:48, 131.82s/batch]Epoch 1/1: 71%|██████████| 156/220 [5:37:17<2:19:58, 131.22s/batch]Epoch 1/1: 71%|██████████| 157/220 [5:39:27<2:17:25, 130.87s/batch]Epoch 1/1: 72%|██████████| 158/220 [5:41:37<2:15:01, 130.68s/batch]Epoch 1/1: 72%|██████████| 159/220 [5:43:47<2:12:29, 130.32s/batch]Epoch 1/1: 73%|██████████| 160/220 [5:45:26<2:00:55, 120.92s/batch]Epoch 1/1: 73%|██████████| 161/220 [5:47:35<2:01:22, 123.44s/batch]Epoch 1/1: 74%|██████████| 162/220 [5:49:45<2:01:20, 125.53s/batch]Epoch 1/1: 74%|██████████| 163/220 [5:51:55<2:00:15, 126.59s/batch]Epoch 1/1: 75%|██████████| 164/220 [5:54:04<1:58:56, 127.45s/batch]Epoch 1/1: 75%|██████████| 165/220 [5:56:13<1:57:19, 127.98s/batch]Epoch 1/1: 75%|██████████| 166/220 [5:58:23<1:55:40, 128.53s/batch]Epoch 1/1: 76%|██████████| 167/220 [6:00:33<1:54:01, 129.08s/batch]Epoch 1/1: 76%|██████████| 168/220 [6:02:42<1:51:50, 129.05s/batch]Epoch 1/1: 77%|██████████| 169/220 [6:04:53<1:50:09, 129.60s/batch]Epoch 1/1: 77%|██████████| 170/220 [6:06:21<1:37:27, 116.94s/batch]Epoch 1/1: 78%|██████████| 171/220 [6:08:30<1:38:39, 120.80s/batch]Epoch 1/1: 78%|██████████| 172/220 [6:10:40<1:38:41, 123.37s/batch]Epoch 1/1: 79%|██████████| 173/220 [6:12:49<1:38:04, 125.21s/batch]Epoch 1/1: 79%|██████████| 174/220 [6:14:59<1:37:01, 126.56s/batch]Epoch 1/1: 80%|██████████| 175/220 [6:17:08<1:35:29, 127.33s/batch]Epoch 1/1: 80%|██████████| 176/220 [6:19:18<1:33:56, 128.10s/batch]Epoch 1/1: 80%|██████████| 177/220 [6:21:27<1:32:05, 128.49s/batch]Epoch 1/1: 81%|██████████| 178/220 [6:23:37<1:30:12, 128.86s/batch]Epoch 1/1: 81%|██████████| 179/220 [6:25:49<1:28:38, 129.73s/batch]Epoch 1/1: 82%|██████████| 180/220 [6:27:17<1:18:08, 117.21s/batch]Epoch 1/1: 82%|██████████| 181/220 [6:29:27<1:18:45, 121.16s/batch]Epoch 1/1: 83%|██████████| 182/220 [6:31:37<1:18:18, 123.64s/batch]Epoch 1/1: 83%|██████████| 183/220 [6:33:46<1:17:17, 125.33s/batch]Epoch 1/1: 84%|██████████| 184/220 [6:35:56<1:15:59, 126.66s/batch]Epoch 1/1: 84%|██████████| 185/220 [6:38:06<1:14:28, 127.66s/batch]Epoch 1/1: 85%|██████████| 186/220 [6:40:15<1:12:35, 128.10s/batch]Epoch 1/1: 85%|██████████| 187/220 [6:42:25<1:10:43, 128.60s/batch]Epoch 1/1: 85%|██████████| 188/220 [6:44:34<1:08:41, 128.79s/batch]Epoch 1/1: 86%|██████████| 189/220 [6:46:45<1:06:53, 129.46s/batch]Epoch 1/1: 86%|██████████| 190/220 [6:48:12<58:26, 116.87s/batch]Epoch 1/1: 87%|██████████| 191/220 [6:50:22<58:23, 120.80s/batch]Epoch 1/1: 87%|██████████| 192/220 [6:52:33<57:40, 123.61s/batch]Epoch 1/1: 88%|██████████| 193/220 [6:54:47<57:06, 126.91s/batch]Epoch 1/1: 88%|██████████| 194/220 [6:56:57<55:19, 127.67s/batch]Epoch 1/1: 89%|██████████| 195/220 [6:59:06<53:23, 128.14s/batch]Epoch 1/1: 89%|██████████| 196/220 [7:01:15<51:25, 128.57s/batch]Epoch 1/1: 90%|██████████| 197/220 [7:03:25<49:23, 128.85s/batch]Epoch 1/1: 90%|██████████|

```

| 203/220 [7:16:11<36:19, 128.18s/batch]Epoch 1/1: 93%| | 204/220 [7:18:44<36:07,
135.46s/batch]Epoch 1/1: 93%| | 205/220 [7:20:53<33:26, 133.74s/batch]Epoch 1/1: 94%| | 206/220
[7:23:02<30:52, 132.30s/batch]Epoch 1/1: 94%| | 207/220 [7:25:12<28:29, 131.49s/batch]Epoch 1/1: 95%|
| 208/220 [7:27:47<27:42, 138.53s/batch]Epoch 1/1: 95%| | 209/220 [7:30:09<25:34,
139.52s/batch]Epoch 1/1: 95%| | 210/220 [7:31:37<20:41, 124.10s/batch]Epoch 1/1: 96%| | 211/220
[7:33:47<18:53, 125.96s/batch]Epoch 1/1: 96%| | 212/220 [7:35:56<16:54, 126.83s/batch]Epoch 1/1: 97%|
| 213/220 [7:38:06<14:53, 127.67s/batch]Epoch 1/1: 97%| | 214/220 [7:40:15<12:50,
128.35s/batch]Epoch 1/1: 98%| | 215/220 [7:42:26<10:44, 128.95s/batch]Epoch 1/1: 98%| | 216/220
[7:44:36<08:37, 129.25s/batch]Epoch 1/1: 99%| | 217/220 [7:46:45<06:27, 129.29s/batch]Epoch 1/1: 99%|
| 218/220 [7:48:54<04:18, 129.08s/batch]Epoch 1/1: 100%| | 219/220 [7:51:02<02:08,
128.88s/batch]Epoch 1/1: 100%| | 220/220 [7:52:57<00:00, 124.59s/batch]Epoch 1/1: 100%| | 220/220
[7:52:57<00:00, 128.99s/batch]

/opt/conda/lib/python3.10/site-packages/keras/src/engine/training.py:3000: UserWarning: You are saving your model as
28526.8s 68 an HDF5 file via `model.save()`. This file format is considered legacy. We recommend using instead the native Keras
format, e.g. `model.save('my_model.keras')`.

28526.8s 69 saving_api.save_model(

28526.8s 70 Epoch 1/1 completed in 28377.32 sec

28527.0s 71 Final models saved at epoch 1

30848.0s 72 Created zip file with monetified images at /kaggle/working/images.zip

/opt/conda/lib/python3.10/site-packages/traitlets/traitlets.py:2930: FutureWarning: --Exporter.preprocessors=
30854.7s 73 ["remove_papermill_header.RemovePapermillHeader"] for containers is deprecated in traitlets 5.0. You can pass "--
Exporter.preprocessors item" ... multiple times to add items to a list.

30854.7s 74 warn(

30854.7s 75 [NbConvertApp] WARNING | Config option `kernel_spec_manager_class` not recognized by `NbConvertApp`.

30854.8s 76 [NbConvertApp] Converting notebook __notebook__.ipynb to notebook

30855.4s 77 [NbConvertApp] Writing 595320 bytes to __notebook__.ipynb

/opt/conda/lib/python3.10/site-packages/traitlets/traitlets.py:2930: FutureWarning: --Exporter.preprocessors=
30857.7s 78 ["nbconvert.preprocessors.ExtractOutputPreprocessor"] for containers is deprecated in traitlets 5.0. You can pass "--
Exporter.preprocessors item" ... multiple times to add items to a list.

30857.7s 79 warn(

30857.7s 80 [NbConvertApp] WARNING | Config option `kernel_spec_manager_class` not recognized by `NbConvertApp`.

30857.7s 81 [NbConvertApp] Converting notebook __notebook__.ipynb to html

30859.2s 82 [NbConvertApp] Support files will be in __results__files/

30859.2s 83 [NbConvertApp] Making directory __results__files

30859.2s 84 [NbConvertApp] Making directory __results__files

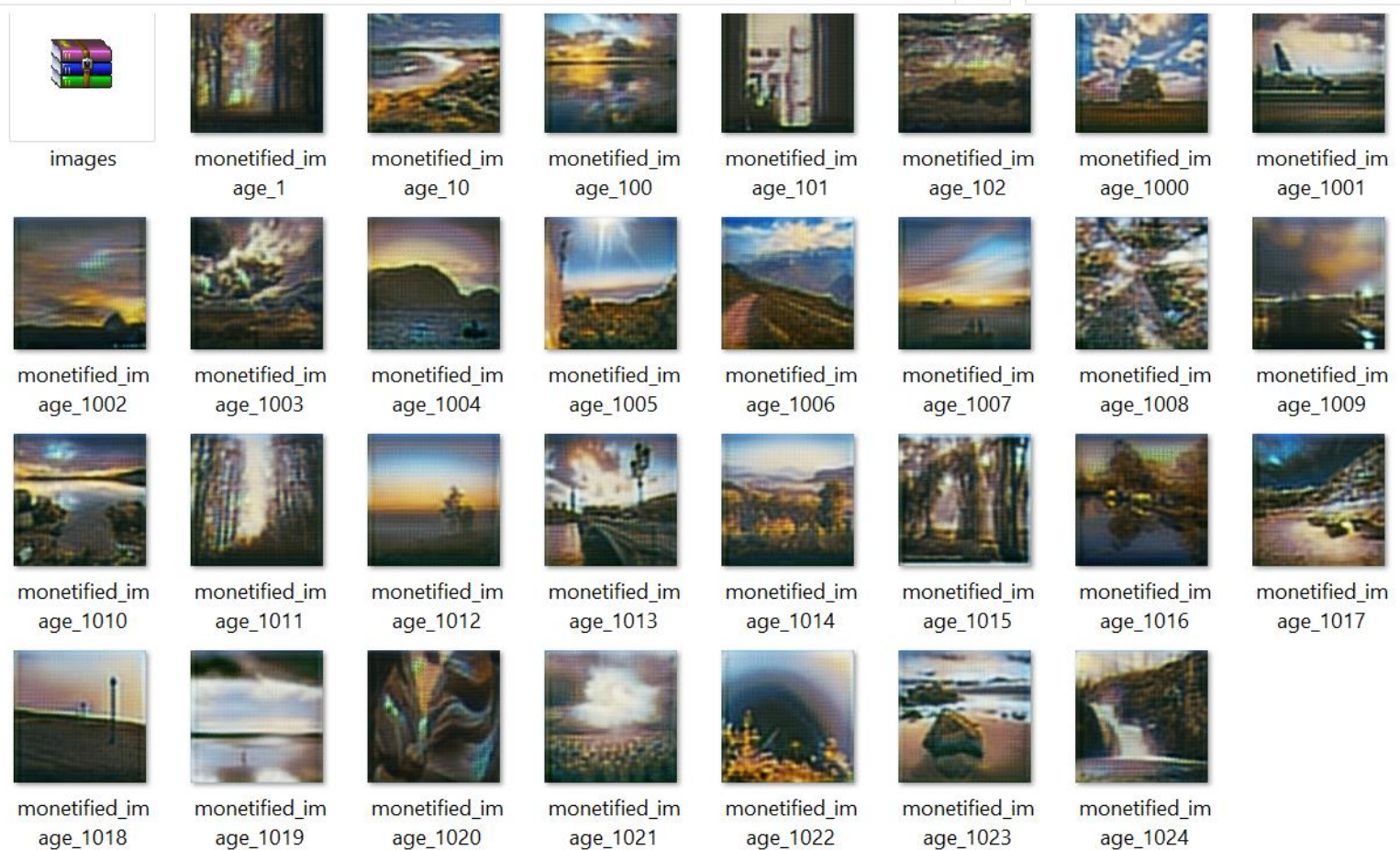
30859.2s 85 [NbConvertApp] Making directory __results__files

30859.2s 86 [NbConvertApp] Making directory __results__files

30859.2s 87 [NbConvertApp] Writing 417595 bytes to __results__.html
```



Here is a screenshot of all the 31 'monetified' images in JPEG format in the 'images.zip' file, as a visual evaluation of the results of this project:



You can click on the GitHub file 'images.zip' to download this exact zipped file if you want to check out the 'monetified' images in detail.

Hope this can make up for the Kaggle submission problem.

Please let me know if there is a way to speed up the training loop without modifying my CycleGAN architecture and reducing the number of photos to be 'monetified' in the dataset. Thank you!