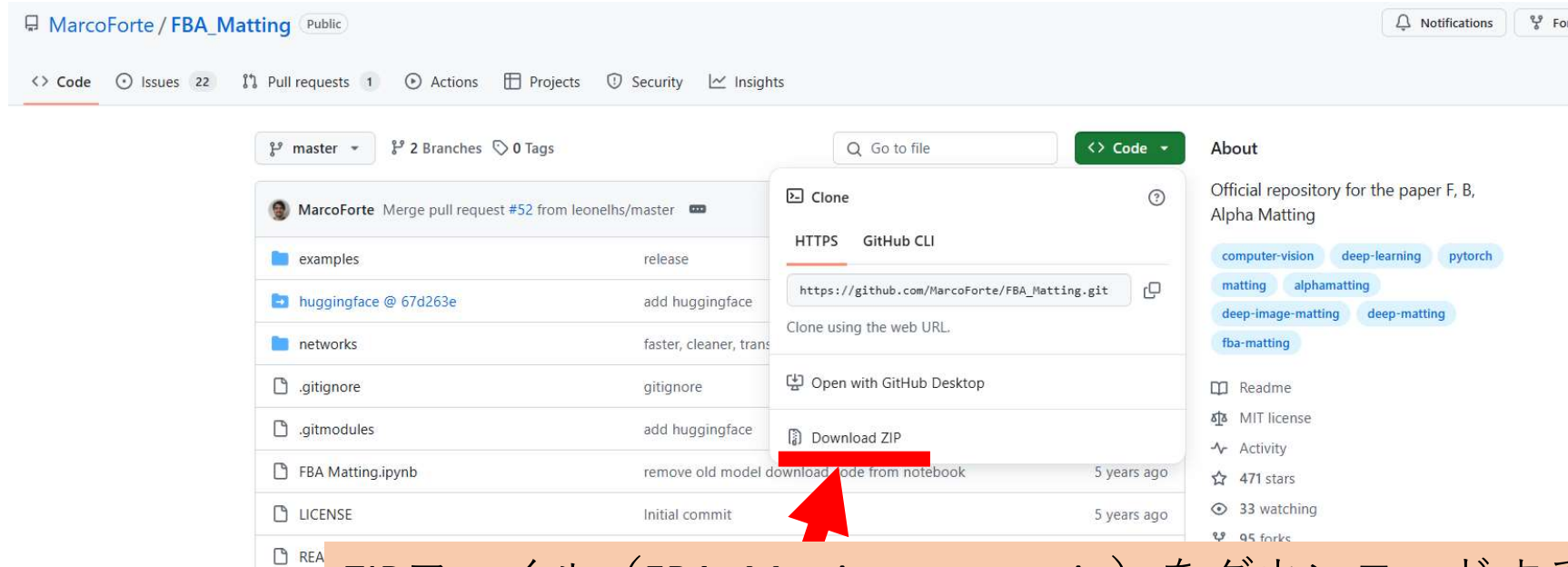


Mattingのインストール

(仮想環境の構築)

Mattingプログラムは，Yolov7の仮想環境で利用できます

FBA_Mattingのページに (https://github.com/MarcoForte/FBA_Matting) 行ってください



ZIPファイル (FBA_Matting-master.zip) をダウンロードする

ページの下に行って、
これをクリックして、
モデルファイルをダウンロードする、
(FBA.pth)

• gdown (to download model inside notebook)

Models

These models have been trained on Adobe Image Matting Dataset. They are covered by the [Adobe Deep Image Matting Dataset License Agreement](#) so they can only be used and distributed for noncommercial purposes. More results of this model available on the [alphamatting.com](#), the [videomatting.com](#) benchmark, and the supplementary materials [PDF](#).

Model Name	File Size	SAD	MSE	Grad	Conn
FBA Table. 4	139mb	26.4	5.4	10.6	21.5

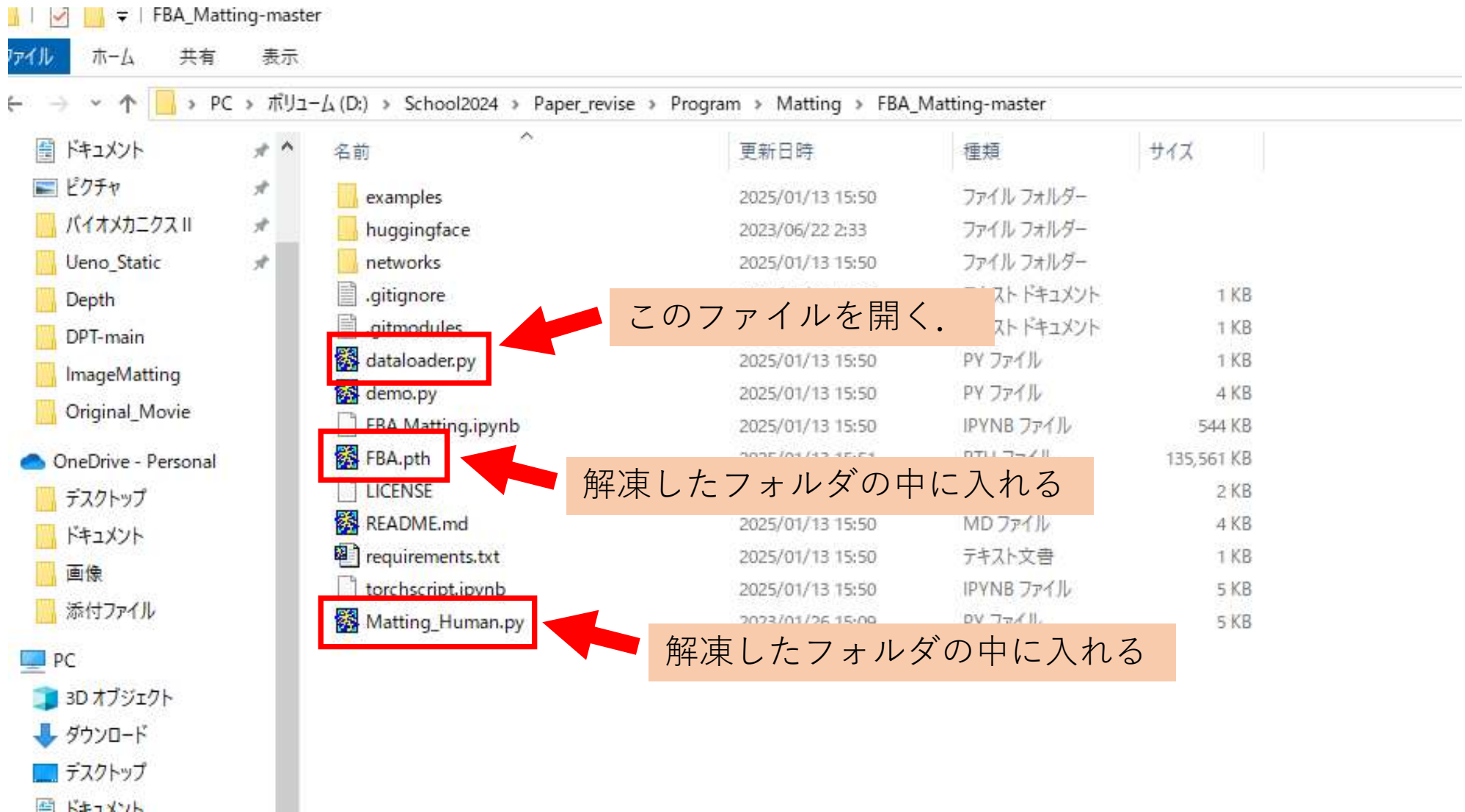
Prediction

We provide a script `demo.py` and jupyter notebook which both give the foreground, background and alpha predictions of our model. The test time augmentation code will be made available soon. In the torchscript notebook we show how to convert the model to torchscript.

In this [video](#) I demonstrate how to create a trimap in Pinta/Paint.NET.

Training

FBA_Matting-master.zipを適当な場所に保存し、解凍する。



dataloader.pyを①から②に変更する。
正しく変更しないと、プログラムは回りません

①

```
1 from torch.utils.data import Dataset
2 import numpy as np
3 import cv2
4 import os
5
6
7 class PredDataset(Dataset):
8     """ Reads image and trimap pairs from folder.
9
10    """
11
12     def __init__(self, img_dir, trimap_dir):
13         self.img_dir, self.trimap_dir = img_dir, trimap_dir
14         self.img_names = [x for x in os.listdir(self.img_dir) if 'png' in x]
15
16     def __len__(self):
17         return len(self.img_names)
18
19     def __getitem__(self, idx):
20         img_name = self.img_names[idx]
21
22         image = read_image(os.path.join(self.img_dir, img_name))
23         trimap = read_trimap(os.path.join(self.trimap_dir, img_name))
24         pred_dict = {'image': image, 'trimap': trimap, 'name': img_name}
25
26         return pred_dict
```

②

```
1 from torch.utils.data import Dataset
2 import numpy as np
3 import cv2
4 import os
5
6
7 class PredDataset(Dataset):
8     """ Reads image and trimap pairs from folder.
9
10    """
11
12     def __init__(self, img_dir, trimap_dir):
13         self.img_dir, self.trimap_dir = img_dir, trimap_dir
14         self.img_names = [x for x in os.listdir(self.img_dir) if 'jpg' in x]
15
16     def __len__(self):
17         return len(self.img_names)
18
19     def __getitem__(self, idx):
20         img_name = self.img_names[idx]
21         Trimap_Name = img_name[0:-4] + '_00.png'
22         print(img_name)
23         print(img_name[0:-4] + '_00.png')
24
25         image = read_image(os.path.join(self.img_dir, img_name))
26         trimap = read_trimap(os.path.join(self.trimap_dir, Trimap_Name))
27         pred_dict = {'image': image, 'trimap': trimap, 'name': img_name}
28
29         return pred_dict
```

変更する

書き加える

変更する