

```

42 def visualize(data, preds):
43     viz = visdom.Visdom(env='main')
44     # print(data.size()) #torch.Size([4, 3, 224, 224])
45     out = make_grid(data)
46     # print(out.size()) #torch.Size([3, 228, 906])
47     #caculator std,mean correctly
48     inp = torch.transpose(out, 0, 2)
49     # print(inp.size()) #return torch.Size([906, 228, 3])
50     mean = torch.FloatTensor([0.485, 0.456, 0.406])
51     std = torch.FloatTensor([0.229, 0.224, 0.225])
52     inp = std * inp + mean
53     # transoise data
54     inp = torch.transpose(inp, 0, 2)
55     # print(inp.size()) #return torch.Size([3, 228, 906])
56
57     # set batch size as 4
58     viz.images(inp, opts=dict(title='{}, {}, {}, {}'.format(
59         preds[0].item(), preds[1].item(), preds[2].item(), preds[3].item()))
60
61     # viz.images(inp, opts=dict(title='{}'.format(preds[0].item())))
62
63 def self_dataset():
64     data_test_root = 'Test_Data\Originals'
65     test_data = GenderData(data_test_root)
66     dataloaders = data.DataLoader(
67         test_data, batch_size=4, shuffle=True, num_workers=0)
68     for inputs in dataloaders:
69         inputs = inputs.to(device) # data inputs
70         outputs = model_test(inputs)
71         _, preds = torch.max(outputs, 1)
72         visualize(inputs, preds)
73
74
75 if __name__ == '__main__':
76     # device = torch.device('cuda:0' if torch.cuda.is_available() else 'cpu')
77     device = torch.device('cpu')
78     print(device)
79
80     model_test = torch.load(
81         'GenderTest.pkl')
82
83     model_test.to(device)
84     model_test.eval()
85
86     dataloaders = self_dataset()
87

```