Semantic Person Search

Name

1. We eliminated the bad data and normalized the data. In the color classification problem, we also performed data enhancement operations such as image flipping.

2. We use ResNet34 as our method and add a classifier to the last layer to get the results we want. The reason for using this network is that it has been proven to be very effective in many scenarios on image classification problems. In order to speed up the training speed, here we use pytorch's pre-trained initialization parameters when training the network, the loss function uses the cross-entropy loss function, the optimization algorithm uses the Adam algorithm, and the learning rate is set to automatically decrease.

3. Our algorithm basically achieves an accuracy of $80\% - 90\%$ on these test sets within 50 to 100 iteration steps. Due to the small amount of data, this effect is still very successful. If you want better results, you need more data. Regarding semantic search, we can use CNN to first extract the features we want from the sentence, and then use our image classification algorithm for matching search.