

#### 1.4.2 Planning how to match UV

In the AR project of painting, the reason why the color of painting can be displayed on the virtual model is that the model pattern on the recognition Image is the position of UV. The recognition Image scanned by app after painting is the texture. The texture is saved in the program through screenshot and assigned to the model as the texture.

So what we need to do now is to match the model's UV according to the shape on the recognition Image. This process mainly does the following five things:

- a. Unfold the UV. Separate the different parts of the model from the UV。
- b. Matching UV with the model structure on the recognition Image。
- c. UV in parts that are not easily visible can be reduced to coincide with other parts of the UV。
- d. The edge of UV should not be too close to the edge of the texture, but should be set aside a certain distance as the overflow value。
- e. Adjustment and loosening of UV. On the basis of matching pattern recognition pattern, we should try our best to achieve the regularity of UV wiring and the average density。