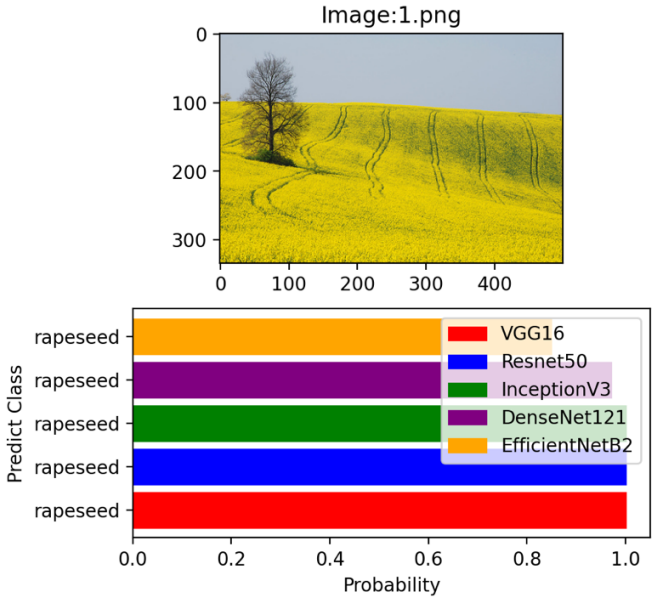


Image:1.png
rapeseed
rapeseed
rapeseed
rapeseed
rapeseed
Predict Class
VGG16
Resnet50
InceptionV3
DenseNet121
EfficientNetB2
Probability

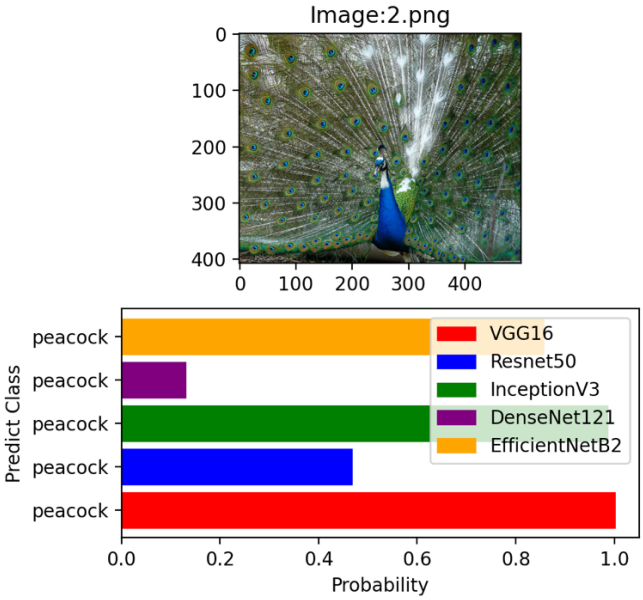


Image:2.png
peacock
peacock
peacock
peacock
peacock
Predict Class
VGG16
Resnet50
InceptionV3
DenseNet121
EfficientNetB2
Probability

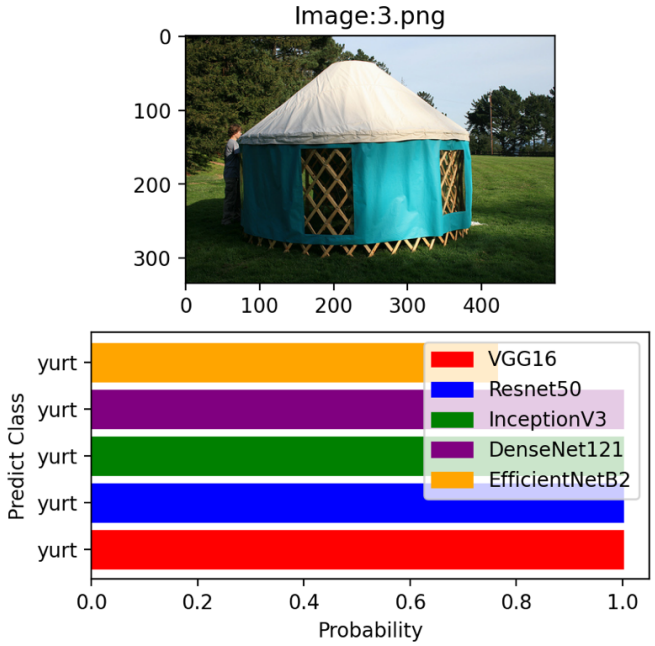


Image:3.png
yurt
yurt
yurt
yurt
yurt
Predict Class
VGG16
Resnet50
InceptionV3
DenseNet121
EfficientNetB2
Probability

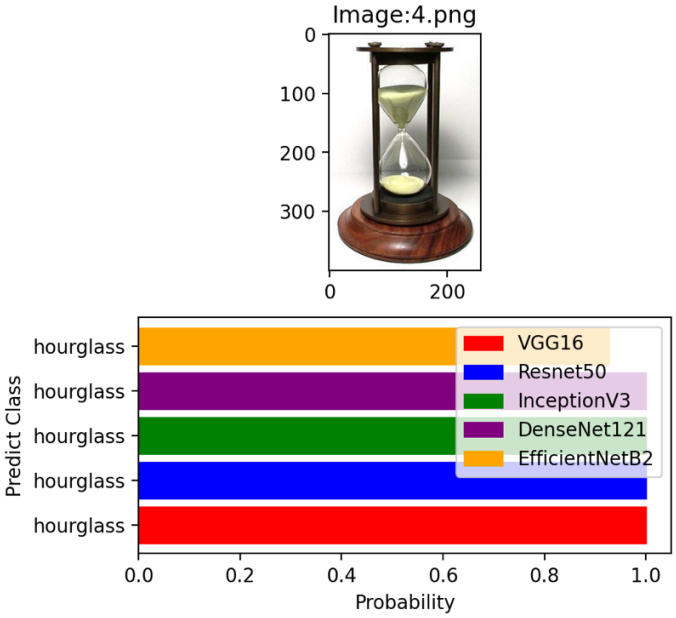


Image:4.png
hourglass
hourglass
hourglass
hourglass
hourglass
Predict Class
VGG16
Resnet50
InceptionV3
DenseNet121
EfficientNetB2
Probability

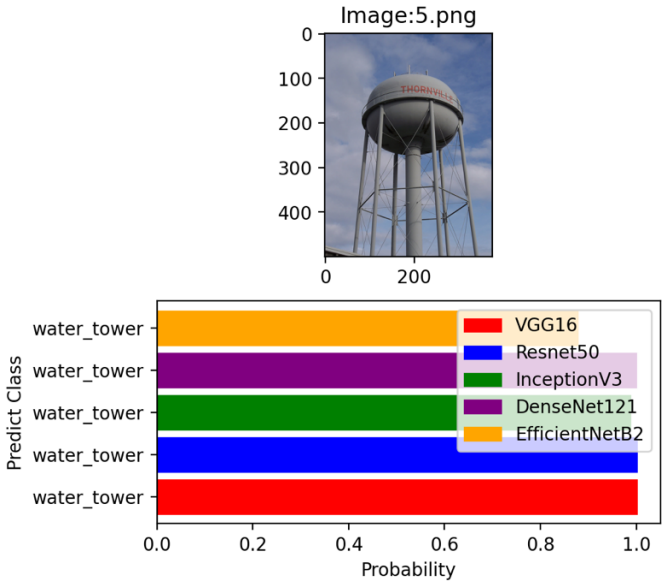


Image:5.png
water_tower
water_tower
water_tower
water_tower
water_tower
Predict Class
VGG16
Resnet50
InceptionV3
DenseNet121
EfficientNetB2
Probability

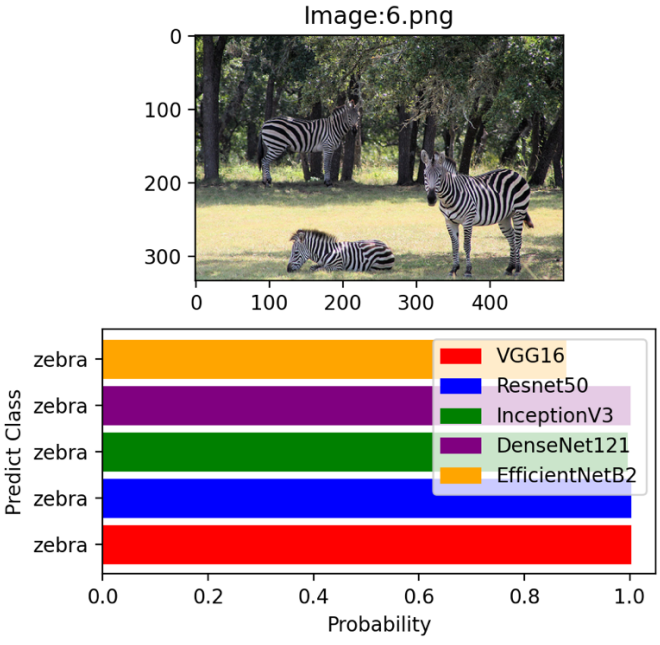
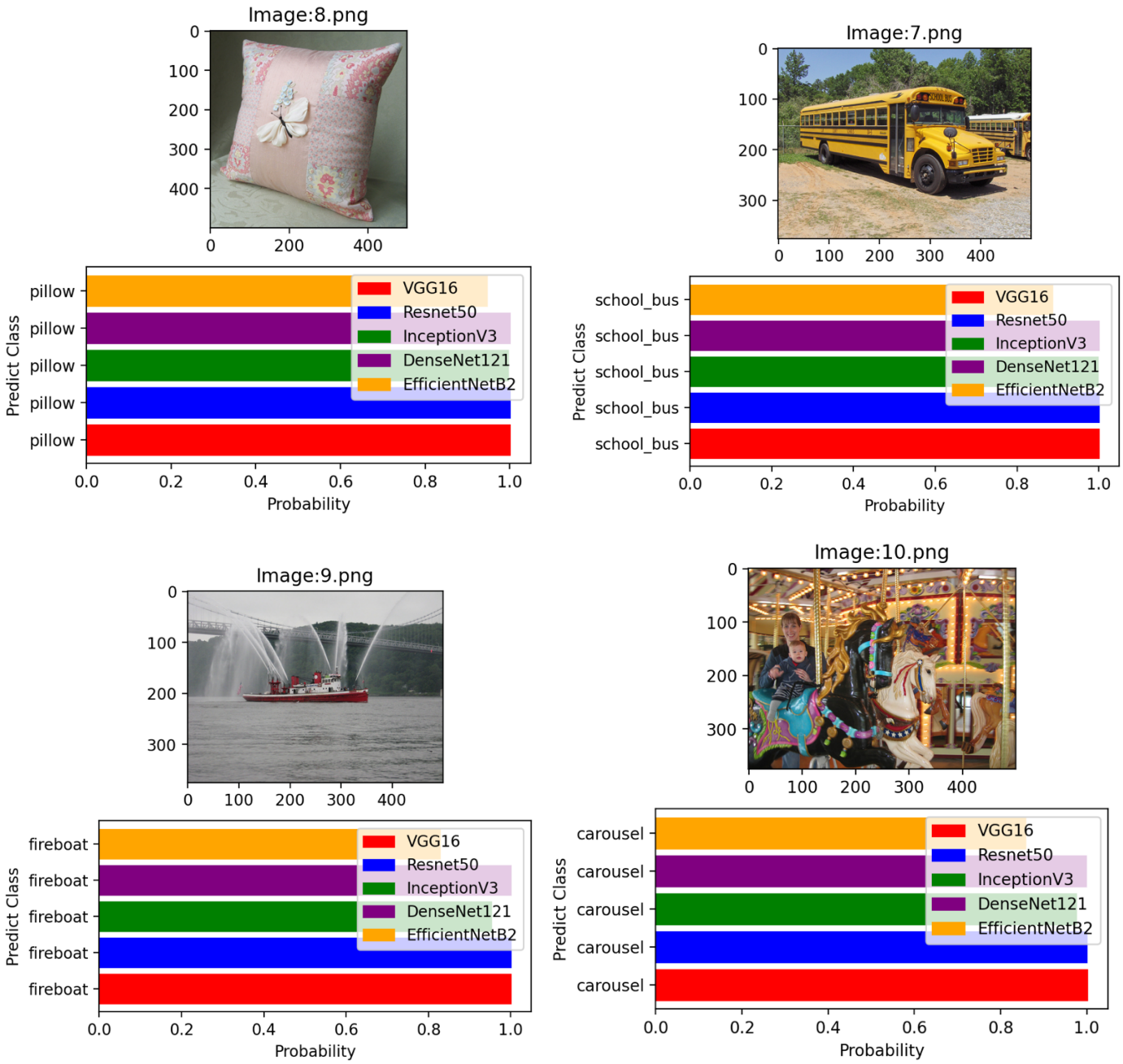


Image:6.png
zebra
zebra
zebra
zebra
zebra
Predict Class
VGG16
Resnet50
InceptionV3
DenseNet121
EfficientNetB2
Probability



The figures above demonstrate the prediction class and its probability made by each five models. The y-axis is the prediction label and x-axis are the probability.

There are few interesting findings. In most of cases except the image of peacock, all models can make correct prediction with very high probability based on the given image. VGG16 and Resnet both have higher probability than DenseNet121 and InceptionV3, which may be due to there are more parameters in VGG16 and Resnet Model. In the case of image is peacock, Resnet and Dense have poor probability while others have relatively high probability, it may be due to the image of peacock is more complex than others.

In addition, in most case the probability from top to down is VGG16 -> Resnet50 -> InceptionV3 -> Densenet121 -> EfficientNetB2. However, the Top-1 accuracy from top to down is EfficientNetB2 -> InceptionV3 -> Densenet121 -> Resnet50 -> VGG16. One of possible reasons may be stronger model has lower overfitting on the image, which may lead to lower probability on right class.