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Last week, we processed a dataset containing images of fashion products, determined belt and gloves types as an example, and saved the images of these belt and gloves in another directory. This week we explored several pre-trained AI models that we can use to classify fashion products and create various AI models based on that classification. As a result of this research, we found 3-4 artificial intelligence models. The models and the reasons why we chose these models are listed below:

1- Convolutional Neural Network (CNN):

Reason: CNNs are widely used for image classification of fashion products. Deep convolutional neural networks are especially successful on visual data and perform feature extraction effectively during the learning process.

2- Transfer Learning - VGG16, ResNet, YOLO or Inception:

Reason: Transfer Learning using pre-trained models is an effective way to use general object recognition capabilities for fashion product classification. Models such as VGG16 (Figure 2.1), ResNet (Figure 2.2), YOLO(Figure 2.3) or Inception(Figure 2.4) can be successful in general object recognition tasks because they are trained on a largelearning data.

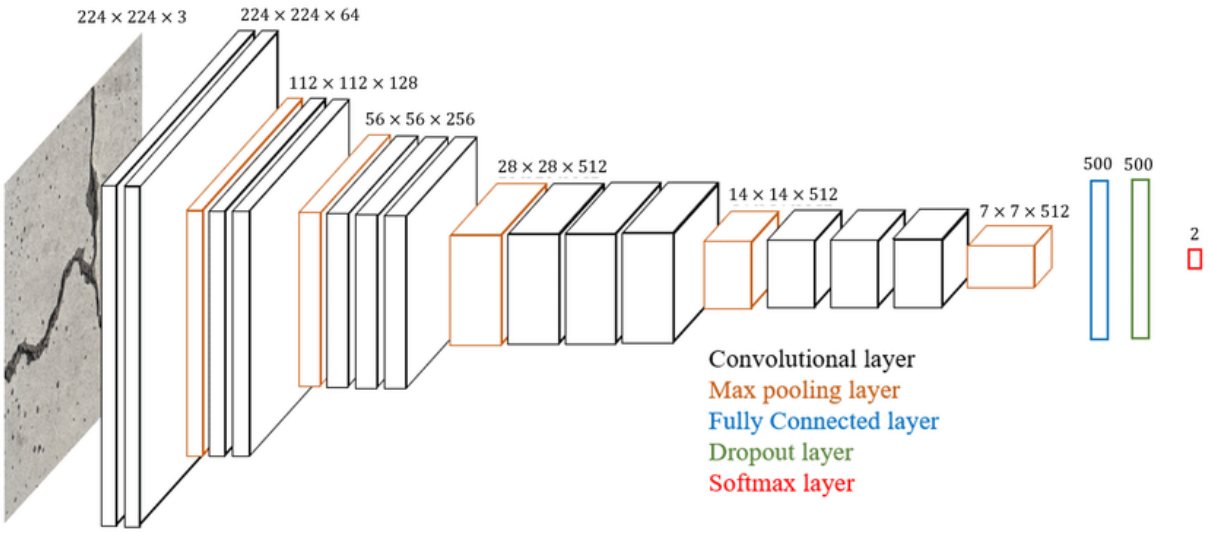

Figure 2.1 VGG16

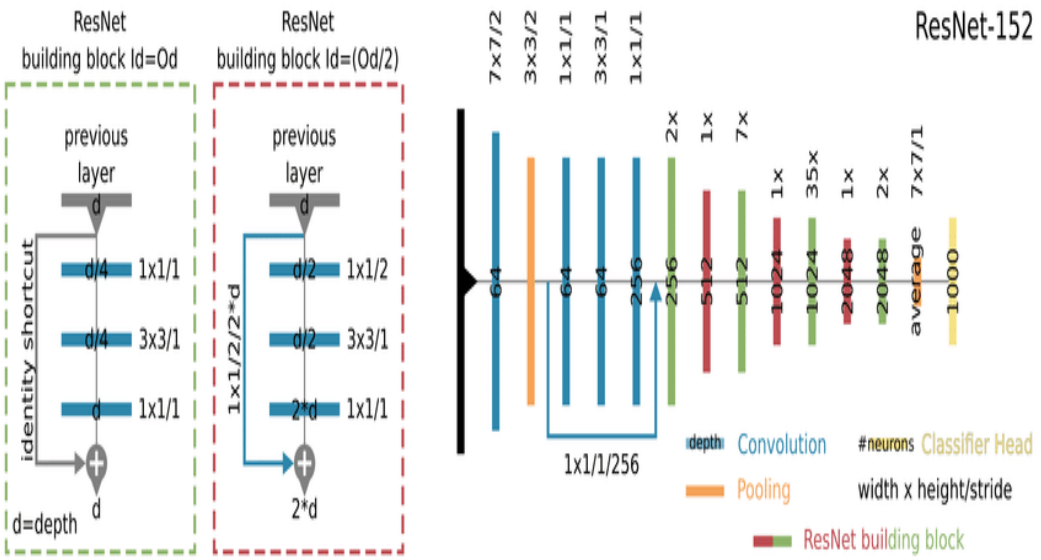

Figure 2.2 Resnet-152

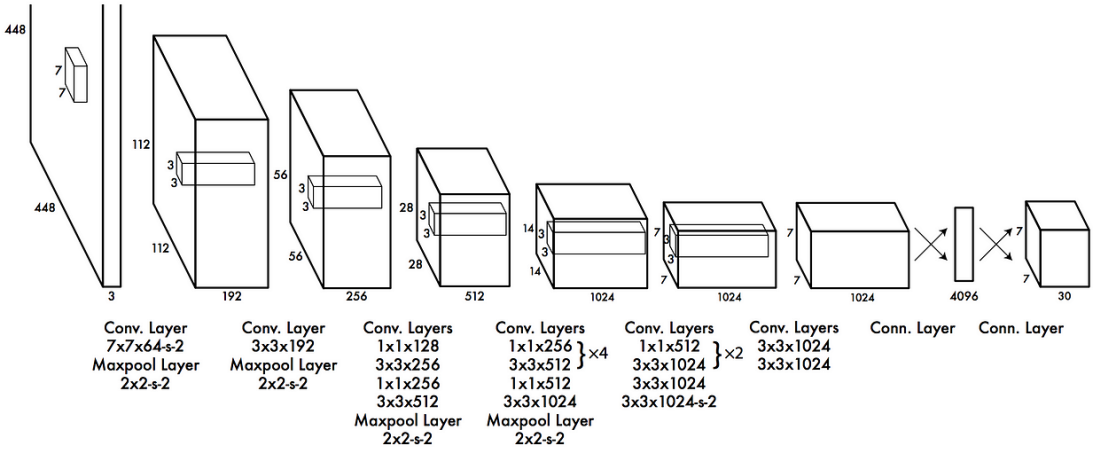

Figure 2.3 YOLO-V1

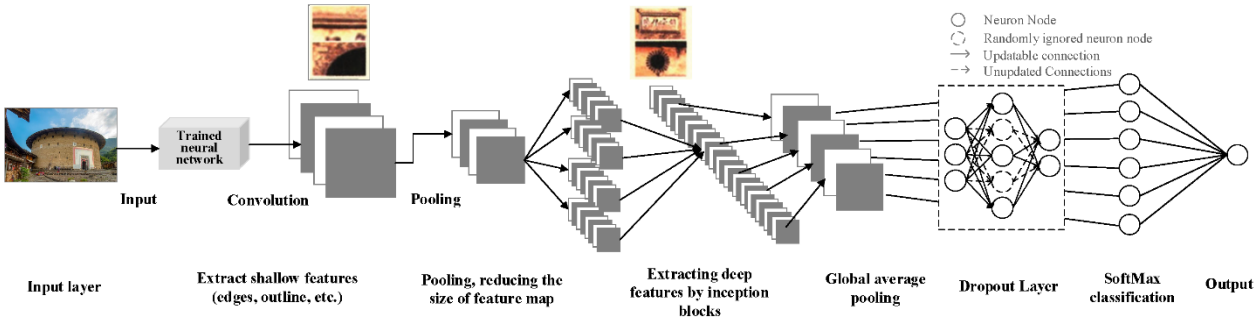

Figure 2.4 Inception