

## List of deep learning pre-trained models categorized by type, along with links to more information about each:

### Image Classification

VGG16: A classic model known for its simplicity and effectiveness.

[VGG16 in TensorFlow](#)

ResNet50: Known for its residual connections that help alleviate the vanishing gradient problem.

[ResNet50 in PyTorch](#)

InceptionV3: Efficient model with a balance of accuracy and computational cost.

[InceptionV3 in TensorFlow](#)

### Object Detection

YOLOv3: Real-time object detection model.

[YOLOv3 in PyTorch](#)

Faster R-CNN: Combines region proposal networks with fast R-CNN.

[Faster R-CNN in TensorFlow](#)

### Natural Language Processing (NLP)

BERT: Bidirectional Encoder Representations from Transformers, great for various NLP tasks.

[BERT in PyTorch](#)

GPT-3: Generative Pre-trained Transformer, known for its text generation capabilities.

[GPT-3 Overview](#)

### Generative Models

GANs (Generative Adversarial Networks): Used for generating realistic images.

[GANs Overview](#)

VAE (Variational Autoencoders): Useful for generating new data samples.

[VAE Overview](#)

### Reinforcement Learning

DQN (Deep Q-Network): Combines Q-learning with deep neural networks.

[DQN Overview](#)

PPO (Proximal Policy Optimization): Balances exploration and exploitation in reinforcement learning.

[PPO Overview](#)