Deep Learning Algorithm List

1. Feedforward Neural Networks (FNN)

- Perceptron
- Multilayer Perceptron (MLP)

2. Convolutional Neural Networks (CNN)

- LeNet-5
- AlexNet
- VGGNet (VGG16, VGG19)
- GoogLeNet / Inception
- ResNet (Residual Networks)
- DenseNet
- MobileNet
- EfficientNet

3. Recurrent Neural Networks (RNN)

- Vanilla RNN
- Long Short-Term Memory (LSTM)
- Gated Recurrent Unit (GRU)
- Bidirectional RNN/LSTM/GRU
- Attention-based RNNs

4. Transformer-based Models

- Transformer (original by Vaswani et al.)
- BERT (Bidirectional Encoder Representations from Transformers)
- GPT (Generative Pre-trained Transformer)
- T5 (Text-to-Text Transfer Transformer)
- Vision Transformer (ViT)
- Swin Transformer

5. Autoencoders

Deep Learning Algorithm List

- Basic Autoencoder
- Denoising Autoencoder
- Sparse Autoencoder
- Variational Autoencoder (VAE)

6. Generative Models

- Generative Adversarial Networks (GAN)
- Vanilla GAN
- DCGAN (Deep Convolutional GAN)
- CycleGAN
- StyleGAN
- Pix2Pix

7. Deep Reinforcement Learning

- Deep Q-Networks (DQN)
- Double DQN
- Dueling DQN
- Policy Gradient Methods
- Actor-Critic
- Proximal Policy Optimization (PPO)
- Deep Deterministic Policy Gradient (DDPG)

8. Graph Neural Networks (GNN)

- Graph Convolutional Network (GCN)
- Graph Attention Network (GAT)
- GraphSAGE
- Message Passing Neural Networks (MPNN)

9. Hybrid & Specialized Models

- Capsule Networks (CapsNet)

Deep Learning Algorithm List

- Neural Ordinary Differential Equations (ODE-Nets)
- Reformer / Linformer / Performer
- Meta-Learning Models (MAML, Reptile)