AI/ML Resources that I Found Helpful

Compiled by Clay Morton

Start here to learn about the basics of AI and Machine learning. This gives a nice foundation and vocabulary for the following resources. Here is an IBM explanation that tells the differences between all the terms mentioned in the previous article.

Note that I view all of the different 'types' of AI as tiers because AI is really a blanket term, but the world tends to group things into 'AI' in general. This document puts the tiers in order of complexity and intelligence/connections as I see them.

Tiers of 'AI'

Tier 1: Artificial Intelligence

IBM's Explanation of AI

Tier 2: Machine Learning

IBM's Explanation of Machine Learning

Tier 3: Deep Learning

IBM's Explanation of Deep Learning

Deep learning applications and uses

Tier 4: Computer Vision

AWS Explanation

IBM Explanation

The Parts

Neural Networks

MIT's Explanation of Neural Networks (surface level)

IBM's Neural Network Explanation (in depth)

IBM Developer VERY deep dive into learning in neural networks

Types of Neural Networks

IBM Convolutional Neural Networks (CNN's)

IBM Recurrent Neural Networks (RNN's)

Turing explanation of Transformer Models

Transformer network step by step

NLP VS. LLM

Comprehensive overview of NLP V LLM

Uses & Applications of NLP & LLM

IBM's Explanation of NLP

Model Training

Oden Technologies on Model training

Model training on hardware & differences in hardware

Hardware

CPU V. GPU

TRG Data Centers

IBM's Explanation of the computational differences for AI

Hardware Requirements

What Hardware is needed (overview)

Scalability, Parts, Hardware, explanations

More complex explanation

Architecture and Processing

How GPU-Based AI Processing Works

NVIDIA GPU explanation

Basic guide to hardware and architecture for AI

AI Hardware Explanation

Intel's explanation of AI hardware

Processing efficiency from MIT study

CUDA Cores VS Tensor Cores

CUDA Explanation 1

CUDA Explanation 2

Tensor Cores Explanation

Tensor V CUDA

Videos

Transformers (great visualizations!)

More transformers Explanation

Transformers Again

Recurrent Neural Networks, Transformers, and Attention

Convolutional Neural Networks

Neural Networks

Neural Network Architecture