# Introduction to Artificial Intelligence

Unit 2 - Summary

- **AI Workflow:** AI Workflow can be broken down in four fundamental steps: data preparation, model training, optimization, and deployment/inference.
- **AI Challenges:** Challenges in developing AI models include exploding model sizes and complexity, need for diverse AI model architectures, performance and scalability, and taking AI into production.
- **NVIDIA AI Platform:** The NVIDIA AI Platform is an end-to-end software platform for production AI.
- **AI Evolution:** Key milestones in the evolution of AI include the availability of powerful graphical processing units (GPUs), large datasets, and improvements in training algorithms.

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### What is the AI workflow?

An AI workflow, often referred to as a machine learning workflow or data science workflow, is a sequence of tasks and processes that data scientists, machine learning engineers, and AI practitioners follow to develop, train, deploy, and maintain artificial intelligence models.

### How does the deep learning workflow operate?

The deep learning workflow involves training the dataset through the neural network, learning a new capability from existing data, optimizing the trained model, and applying the capability to new data.

### What are the common challenges enterprises face when adopting AI?

Some of the challenges include exploding model sizes and complexity, the need for diverse AI model architectures, performance and scalability, and taking AI to production.

### What are the key differences in the realm of AI?

The key differences include the use of large datasets, sophisticated statistical methods, neural networks, and transformer models to analyze, predict, learn, and generate new and unique content.