Deep Learning Fundamentals

Description

Deep learning is a sub-branch of artificial intelligence known for its ability to learn from large data sets, which creates complex data representations using a type of algorithm called artificial neural networks. Deep learning algorithms can automatically learn patterns within the data and make predictions using these features.

Deep learning has a wide range of applications and its main application areas are as follows.

- Image and Voice Recognition
- Natural Language Processing (NLP)
- Games & Game Strategies
- In the Field of Health
- Automated Driving and Transportation
- Advertising & Marketing

Outline

A Look at Deep Learning

What is Deep Learning? (Deep Learning)

Artificial Intelligence, Machine Learning and Deep Learning

Real Life Examples

Why Deep Learning

Reasons for the Recent Development of Deep Learning

Fundamentals of Deep Learning

Artificial Neural Network (ANN)

Understanding Deep Learning

Deep Learning Basic Concepts

- Mathematical Foundations
- Activation Functions
- Gradient Descent Algorithms
- Loss Functions
- Backpropagation Algorithm
- Tensor Operations
- Deep Learning Success Evaluation Criteria