

Advanced Topics in Artificial Intelligence

1. Machine Learning

1.1 Supervised Learning

Artificial Intelligence (AI) is an interdisciplinary field that aims to build machines capable of performing tasks that typically require human intelligence. These tasks include learning, reasoning, problem-solving, perception, and language understanding. AI can be categorized into several types based on capabilities and functionalities.

1.2 Unsupervised Learning

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1.3 Reinforcement Learning

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2. Deep Learning

2.1 Neural Networks

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2.2 Convolutional Neural Networks

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2.3 Recurrent Neural Networks

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3. Natural Language Processing

3.1 Text Preprocessing

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3.2 Transformers and BERT

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3.3 Sentiment Analysis

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