

Discussion on Artificial Intelligence (AI)

Artificial Intelligence (AI) is one of the most rapidly growing areas in computer science. It focuses on creating intelligent machines that can perform tasks which normally require human intelligence. Examples of such tasks include learning from data, decision making, problem solving, speech recognition, and image processing.

In recent years, AI has been widely used in various real-world applications such as virtual assistants, recommendation systems, autonomous vehicles, healthcare diagnostics, and fraud detection systems. Machine Learning (ML), a subset of AI, allows systems to automatically improve their performance by learning from previous experiences and large datasets.

AI systems often rely on large amounts of data and distributed computing environments to work efficiently. This is where concepts from Distributed Systems become important. By distributing data and computation across multiple machines, AI applications can process information faster and handle large-scale problems effectively.

In the previous section of this coursework, study materials were shared and downloaded using torrent-based peer-to-peer file sharing. This method demonstrates how large files, such as datasets or research documents related to AI, can be efficiently distributed among multiple users without depending on a single centralized server.

In conclusion, Artificial Intelligence combined with Distributed Systems plays a crucial role in modern computing. Understanding these concepts helps students gain practical knowledge of how real-world intelligent systems are designed, shared, and executed at scale.